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ABSTRACT

This publication offers suggestions for improving management so that organizations, especially further education institutions, will be more effective. The conceptual bases for the book are three "tool chests": strategic thinking, speedy decision, and total quality improvement. Chapter 1 clarifies strategic planning and provides case examples that illustrate both good and less effective practices. Focus is on additional variations of practice, information, and environmental scanning. Each topic is designed to contribute to a greater depth of understanding and to promote skill in the application of the concepts. Chapter 2 offers evidence of and guidelines for speedier decision making from research, case studies, and quotations. It contains principle-level prescriptions and operational specifics. The discussion is structured around six action principles. Best-in-class examples from leading firms that provide ideas or models for educational organizations illustrate the principles in use. Action principles are given practical expression by quotations, quick starts that are short range and simple, and first steps that are longer range and complex. Chapter 3 contains an edited version of a conference address, "Is There a Better Way to Manage Higher Education?" (Lawrence Sherr), which is a statement on total quality improvement. Eleven references are listed. (YLB)

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Total management for organisations:

concepts and tools

Robert Cope

with Lawrence Sherr

U.S. DEPARTMENT OF EDUCATION
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Adelaide 1991

Total management for organisations: concepts and tools:

A HANDBOOK FOR TERTIARY EDUCATION

Robert Cope
with
Lawrence Sherr

Adelaide
1991

TAFE

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PREFACE

Simply put, this small book is about improving management so that organisations (especially tertiary education institutions) will be even more effective.

I have spent most of the last 25 years consulting with, researching, writing and teaching about tertiary institutions. However I realise that these institutions are very complex and the administrative tools are blunt. There are no easy answers. At least, I know of none.

My firmest belief is that each person working with others must create the most probable managerial solution capable of working in a particular context. What will work, say, in Darwin, will be rejected in Sydney. What will be apples in Campbelltown, hasn't a Buckley's in Fremantle.

The community values, the size of the organisation, its recent and not so recent history, the state of the economy, personalities, structures and so forth; all are significant and all interact and create webs of uncertainty, so that the possibility of developing a general theory of organisational effectiveness is about as likely as hoping to advance a general theory of Life . . . or Love . . . or Employment, or Interest Rates, or . . . and so forth.

It may surprise the reader that although the writer is American, American management concepts/ideas/tools will not be introduced. Arguably the personal and business organisation wealth created on the North American continent in this century has more to do with the hard-work habits of immigrants, abundant natural resources, and the good fortune of not having an industrial base destroyed in warfare, than the wisdom of industrialists, entrepreneurs, and professors of management.

Furthermore, good management concepts are global. The British, for example with Trist and Burns; the Canadians, with what I call the 3Ms, Mintzberg, Miller and Morgan; the Australians, with Mayo and Emery; the French, with Crosier and Fayol; the Japanese, with Ishiawa and Imai. These all contribute to a global community pool of organisation management practice.

Experience has only helped me - at this point in my 50 plus years - to see the usefulness of a batch of tools found in the three work chests that provide the conceptual bases for this book. Given the complexity of our organisations, the application of each tool is based on experience-guided, innovative thinking.

What are those chests and what are the tools?

There are three tool chests:

Chest	Tool
Strategic thinking chest	Vision statement Theme sets
Speedy decision chest	Real-time data Multiple alternatives Multi-function teams Vision Decisive leader
Total quality improvement	Focus on stakeholder needs Human resource training Teams and councils Respect for individuals Shared vision Streamlined systems Continuous assessment

Strategic thinking provides direction. Where is the organisation going? the tools for **speedy decisions** provide movement/momentum for getting there. **Total quality** provides for the highest form of maintenance to assure the organisation's soundness.

The remainder of this deliberately short publication provides introductions to the three chests and some examples of the tools in application. The book was originally prepared to accompany a series of TAFE National Centre for Research and Development workshops offered in 1991.

Robert G. Cope,
Associate Professor
Policy, Governance and Administration
University of Washington, Seattle. USA

ACKNOWLEDGMENTS

Perhaps the most enjoyable moment in preparing a publication is thinking of those to thank for ideas and assistance.

My wife, Nancy, provided the insight for the title.

Bill Hall of the TAFE National Centre for Research and Development has been a professional friend and inspiration for me since the 70s. He encouraged me to pull these ideas together.

TAFE staff and administrators from Sydney to Perth shaped my thinking further and convinced me, that in most ways Australians are ahead of Americans in their concern for quality improvement and are second to none in making faster decisions.

Gurudav Kulsa got me thinking systematically about speedier decisions and Kathleen Eisenhardt provided the insights I needed to become a believer.

And Ellen Chaffee, Laurence Sherr and colleagues in Western Australia are my gurus for total quality concepts.

What is left is mine.

Robert Cope
Mercer Island
USA

CONTENTS

	Page
PREFACE	iii
ACKNOWLEDGMENTS	v
CONTENTS	vii
ILLUSTRATIONS	x
CHAPTER 1: CLARIFYING STRATEGIC PLANNING	1
THE STRATEGIC CONCEPT	1
Why strategic planning?	1
What is strategic planning?	2
Direction finding and shaping	5
Strategic thinking	5
HOW STRATEGIC PLANNING HAS BEEN DONE: SOME CASE EXAMPLES	7
Working parties and teams	8
Change brings on strategic planning	8
Case sketches	8
A strategic framework	12
MISSION, VISION, THEMES, LEARNING	14
A CHECKLIST FOR STRATEGIC PLANNING	15
Preplanning	15
Content	15
Process	16
Content of process	16
Outcomes	17
ADVANCED STRATEGIC THINKING	17
Differentiating *where* and *how*	17
A compass as metaphor: pathfinding	18
Postitioning	18
Satisficing and loose-coupling	22
Is the strategic concept equally useful for any tertiary institution?	23

Page

CHAPTER 2: SPEEDIER DECISION-MAKING 25

INTRODUCTION TO THE BASIC POINT-OF-VIEW OF THIS CHAPTER 25

WHY FAST IS ESSENTIAL 26

Introduction 26
Australia and international trade 28
Higher speed - higher performance 28

MIND 30

Computerised information 32
Forecasting, with or without the computer 33
Information and organisational purpose 34
The strategic triangle for information 34
Key success factors and key success indicators 35
A personal account 37
Concluding point 39

THE TEAM 41

First about process 42
A beer company 43

LEADERSHIP 44

Leadership is hard to define 44
Vision 45
Politics 49
Advisers/Counsellors/Confidants 49
Summary 52

RECOMMENDATIONS: GETTING IT TOGETHER 53

Summary 57

CHAPTER 3: TOTAL QUALITY IMPROVEMENTS 58

What is total quality? 58

IS THERE A BETTER WAY TO MANAGE HIGHER EDUCATION? 59

FOR MOTOR COMPANY 62

DEMING AND STATISTICAL QUALITY CONTROL 64

CONSTANCY OF PURPOSE 65

	Page
ADOPT A NEW PHILOSOPHY	67
CEASE DEPENDENCY ON INSPECTION	68
INSIST ON QUALITY MATERIALS	69
IMPROVE QUALITY AND PRODUCTIVITY	70
IMPROVING HUMAN RELATIONS	72
REFERENCES	73

ILLUSTRATIONS

			Page
I	*Differentiating strategic planning from other forms of planning*		3
II	*Strategy design and implementation model*		4
III	*Strategic triangle for integrating the thinking of planning, management and leadership*		6
IV	*Academic planning framework of Distinctive University*		13
V	*(a)*	*Defining position along three dimensions*	19
	(b)	*Joint-space map of market positions*	19
	(c)	*Product positioning*	20
VI	*Strategic shifts at BHP*		21
VII	*Application of the strategy concept to organisations*		24
VIII	*Faster decision models*		30
IX	*Strategic triangle*		35
X	*Confidence triangle*		52

CHAPTER ONE

CLARIFYING STRATEGIC PLANNING

Strategic planning is as old as the construction of the pyramids and as ancient as Sun Tzu's 2500 year old treatise *The art of warfare*. Its recent history is linked to management concepts advanced at the Harvard Business School in the mid-1960s and to tertiary institutions in the 1980s.

In the world of tertiary institutions strategic planning got off to a highly visible start in 1983 with George Keller's *Academic strategy*, one of the largest selling books ever written on the management of the Academy. Its subsequent widespread use suggests that where properly conceived and carried out, the application of the strategic concept leads to improved institutional vitality, which for the purpose of this book is defined as a combination of success and prosperity: success in mission fulfilment with the acquisition of sufficient resources for prosperity.

Written mostly for the benefit of the practitioner of the management arts in organisations, this chapter seeks to achieve three related purposes: (1) to clarify, (2) to illustrate, and (3) to provide some understanding of the depth of the strategic concept. Those purposes follow in this sequence:

1. First there is a clarification of strategic planning, what it is and what it is not.

2. Then a few case examples illustrate both good and less effective practices.

3. Finally, the last sections focus on additional variations of practice, on information, and on environmental scanning. Each topic is designed to contribute to a greater depth of understanding and to promote skill in the application of the concepts.

THE STRATEGIC CONCEPT

The strategic concept is both simple and complex.

Undoubtedly part of the concept's global popularity is due to its rich intellectual challenge and its range of practical applications. The strategic concept takes an organisation's attention to higher than usual levels of complexity; not just the present, but the past, present and future; not just data, but wisdom; not just participation, but consensus building; and so on.

Why strategic planning?

Strategic planning appears to have been grasped by the tertiary education community in the early 1980s in its attempt to respond to certain pervasive problems that to varying degrees continue today:

- many institutions seemed to have no clear vision or mission. Communication through the institution regarding purposes/goals/vision

was unclear. Control was lacking;

- there was substantial turbulence in the environment: government policy was not predictable; new technologies (computer, biogenetic) were present; competing institutions were adopting new techniques of marketing, and so on;

- there was too much attention to short-term, internally-directed problems and issues, focussing on details, seeing only the parts and not the whole;

- there was little connection between institutional master plans, the enrolment plans, and the budget plans; and

- particularly these days in Australia, amalgamations are altering conditions everywhere.

By the mid-1980s the strategic planning approach dominated both the scholarly and practitioner-oriented literature in both private enterprise and in, at least, American institutional management. In the early 1980s for example, perhaps 2 per cent of American institutions could be found practising strategic forms of planning. By the beginning of the 1990s only 10 per cent would admit that they are not planning strategically. In follow-up studies of these institutions undertaken by Meredith, Lenning and Cope (1988), it was concluded that most of these institutions had begun strategic planning in order to find direction, set priorities, focus effort, and in general to gain more control over the institution's future.

What is strategic planning?

There are many definitions. From the earliest proposed for business to the more recent for higher education, all relate to a management function designed to achieve goals in dynamic, competitive environments by the allocation of resources.

Most definitions assert that strategic planning is planning for the whole organisation while taking account of the environment external to the organisation. Proponents argue that this emphasis of whole organisation to whole environment is essential to institutional vitality, even survival. Strategic planning appears to have one essential characteristic and that is its desire to determine direction for the whole enterprise in relation to the ecosystem. It is proactive.

Beyond the connection with the environment, the concept is difficult to define with precision. There is the usual semantic confusion true of any concept that has characteristics, for example, of an academic discipline that is more art than science. The business community, with over 30 years of literature and practice with the concept, now gives little attention to definitions.

Since tertiary institutions, however, still appear to need a definition for describing this form of management as well as for organising research, this two paragraph definition draws attention to essential elements:

Strategic planning is an open systems approach to steering an enterprise over time through uncertain environmental waters. It is a proactive problem-solving behaviour directed ***externally*** *towards conditions in the environment. It is a means to find a favourable, competitive position in the continual competition for resources.*

The primary purpose is achieve success with mission while linking the institution's future to anticipated changes in the environment in such a way that the ***acquisition of resources*** *(money, personnel, staff, students, goodwill . . .) is faster than the* ***depletion of resources****.*

This definition, because it places the emphasis on the acquisition of resources, identifies a key point in the *bottom-line* reason for strategic planning: prosperity. Simply, however, strategic planning is what the enterprise does to position itself favourably relative to resources in the environment.

The characteristics shown in Illustration I are frequently used to define what is strategic.

The distinctions made in Illustration I suggest that the application of the strategic concept is on the external environment; is oriented toward institutional changes; is directed by a vision of future states: and with an orientation toward finding synergy, wholeness, effectiveness, and patterns in decision-making while those within the institution use qualitative information to guide their intuitive judgments.

Other forms of planning ranging from budget and master planning to what had been called long-range planning (usually about enrolment levels) have tended to have the characteristics of the right hand column.

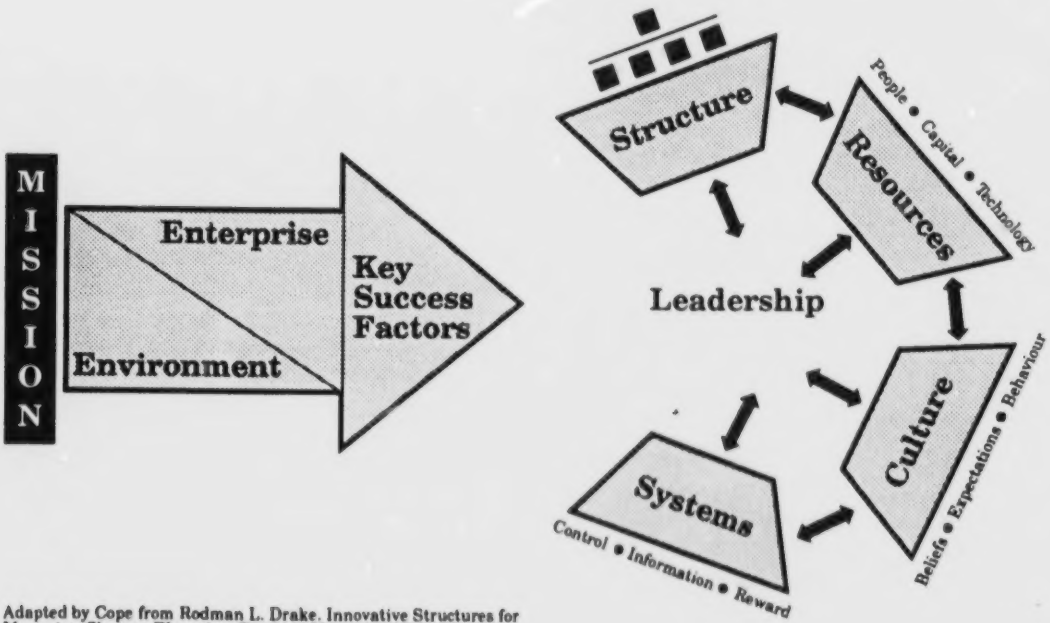
Illustration I: Differentiating strategic planning from other forms of planning

STRATEGIC PLANNING	OTHER PLANNING
Usually	**Usually**
Emphasises the environment	Emphasises the enterprise
Oriented toward change	Emphasises stability
Vision directed	Follows goals and objectives
Inductive and integrated	Deductive and analytical
Pro-active	Re-active
Emphasis on doing the right things	Emphasis on doing things right
Art form, intuitive	Science, seeks exact answer
Open system and external focus	Closed system and internal focus
Anticipates changes ahead	Extrapolation of future from past
Current decisions based on looking from the present and future	Current decisions based on booking from the past and present
Entrepreneurial and action oriented even when there is ambiguity	Inaction when there is ambiguity
Emphasis innovation and creativity	Emphasis tried and tested
Synergistic	Univariate
Enterprise's environment and context are primary determiners of strategy/choices/direction	Enterprise's strength and weakness are primary determiners of strategy/choices/direction
Opinions, intuition and qualitative	Facts and the quantitative are emphasised
Effectiveness orientation	Efficiency orientation
Patterns are in a stream of decisions	Decisions are made and carried out

Source: adapted from a draft manuscript by Mark Meredith, Robert Cope and Oscar Lenning. "Differentiating bona fide strategic planning from other planning" Manuscript of April 1987,p.20.

The two part model in Illustration II has been found useful to see the strategic concept in contrast to organisational development or what may also be translated into the total quality concept described in the third portion of this guide.

Illustration II: ***Strategy design and implementation model***



Adapted by Cope from Rodman L. Drake. Innovative Structures for Managing Change. **Planning Review**, November 1986. 18 — 22.

The left part of the model emphasises mission, the environment, the enterprise's strengths and key success factors. Key success factors include what an institution must accomplish relative to its resource providing ecosystem in order to be successful in mission fulfilment and prosperity. Taken together the key success factors contain most of the elements ascribed to a vision. And vision is one of the two key tools in the strategy tool box. For example, when the Cairns TAFE college moved inland to set up an agricultural arm, and north to establish studies of Aboriginal and Islander art and culture, it adjusted to *opportunities* in its environment. These are two of several key success factors necessary to fulfil its mission.

As a process, the left part of the model describes an intellectually demanding search that relates the institution's future vision to opportunities in the environment resulting in a future vision. As one American college president put it, . . . *strategic planning is a self-discover process that recognises and responds to environmental pressures and opportunities within the limits of the college's resources.* Another said, *Strategic planning is a participative process for the design of any imaginable future - one harmonising diverse activities while providing a good fit between opportunities and strengths.*

Consistent with much of business practice that tends to encompass both strategic (left) and organisational (right) issues, strategic plans develop from the factors on the left of this model. This is strategic formulation and is taken to be direction finding relative to the environment.

For the purpose of refining a vision further it is recommended that themes be identified for focusing resource applications. Themes focus institutional initiatives.

The *implementation* of strategy is accomplished by making changes in those organisational factors on the right of the model. Implementation as opposed to direction finding is shaping and maintaining the quality of the institutional enterprise. The arrangement of structures, the allocation of resources among competing demands internally, the development of favourable campus cultures (beliefs, expectations, and behaviours), and the application of appropriate systems (for rewards, control, and information) is shaping quality control.

This direction finding and shaping interpretation of the strategic concept is consistent with Henry Mintzberg's 1987 award winning article in the *Harvard business review* (Mintzberg 1987) where his analogy is of the potter artist with clay. Strategists are craftswomen and men who have a vision of what will be and subsequently shape the material in accordance with the vision. According to Mintzberg, . . . *The product that emerges on the wheel is likely to be in the tradition of her past work, but she may break away and embark on a new direction. Even so, the past is no less present, projecting itself into the future* (p. 66).

Nearly all of this chapter deals with the direction-finding, formulation dimension of the strategic concept, that is, the left side of the model.

Direction finding and shaping

The left side of the model emphasises direction finding; the right side shaping. The metaphors are the compass (direction finding) and clay (shaping).

Risk is associated with direction finding as well as with movements in the environment. Risk is associated with strategising. There is more risk where the enterprise does not have control, and most educational organisations have little control in their environments. The left side of the model is therefore about risk.

The right side of the model is about shaping the enterprise to keep it fit and efficient - running well. There is less or no risk in reshaping the structure, reward systems, control systems, and the set of values referred to today as organisational culture. There is little risk in clarifying relationships among units in an organisation's structure, or in developing fairer reward systems, or in tightening the system of accounting, or in emphasising the importance of the organisation's culture, particularly as it relates to quality. This aspect is emphasised in Chapter 3 by Professor Sherr.

It is contended that most of the confusion today in understanding the strategic concept is because too few practitioners and too few researchers make the distinction between the uses of the compass and of clay.

Strategic thinking

The otherwise separate, fuzzy concepts of planning, management and

leadership are frequently joined in what is called the *strategic form of thinking*.

Josh Owen, who directs an administrative training institute at the University of New South Wales, provides this definition of strategic thinking:

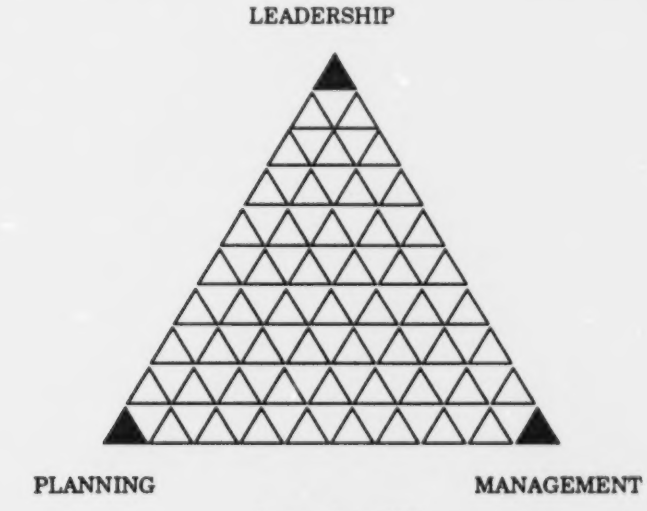
> *Strategic thinking involves asking the question: **Where** does my institution want to go? Operational planning is concerned with answering the question: **How** should my institution get there? Combining these two aspects, I define strategic thinking as the process of developing a vision of where the institution wants to go and then developing managing strategies [plans] on how to get there.*

I added *plans* to Josh Owen's statement. To reduce the all too prevalent over use of the term *strategy*, I recommend strategy, strategic, strategising and other variations of the root word *strategy* be used exclusively with the left side of the model. The primary reason underlying this is because resource acquisition (money, students, staff . . .) is more directly related to strategic choices made for direction finding relative to the resource providing ecosystem.

The use or modification of the resource follows its acquisition. Once acquired the resources are employed to shape the institution. I believe it is useful to distinguish in an analytical process between *doing the right thing* and then *doing things right*. Doing the right thing is getting properly positioned in the environment. Finding the right niche is getting positioned strategically. Determining means to get to the appropriate niche is dependent upon tactics or operations or simply doing things right. This is a re-statement of the *what-or-how* or *ends-or-means* arguments applied to the strategic concept.

The complete formulation for doing the *right things right* from strategic planning as formulation, to management planning as implementation, with leadership providing integration may be expressed as a strategic thinking triangle. See Illustration III.

Illustration III: Strategic triangle for integrating the thinking of planning, management, and leadership



Source: Ohmae 1982

I frequently employ versions of a triangle to illustrate management concepts. The use of triangles frequently seems to demonstrate complexity in Eastern traditions. For example, the three concepts of this book (strategy, faster decisions and total quality) could be placed at points of the triangle.

In sum, strategic planning is, was, and always will be a way of **thinking**.

The case used in conjunction with this guidebook illustrates three approaches to total management, to the total process of strategic thinking. Thus, the strategic element of the case study emphasises the components of the left hand sides of the earlier Illustrations I and II. Yet as the triangle's greater complexity suggests, strategy formulation and its implementation merge into more than a bi-polar process. Strategic planning and implementation are more fluid and creative than simple illustrations can indicate.

Strategic planning is in essence and at its best an idea-driven, intellectual pursuit, involving at least creativity, leadership, vision, and wisdom.

HOW STRATEGIC PLANNING HAS BEEN DONE: SOME CASE EXAMPLES

This section describes the usual strategic planning practices at a sample of institutions. Some of the case examples are more complete than others; only enough detail is given to provide the institution's particular context and illustrate the application of a strategic planning model.

Some case examples represent complete processes while other examples are quite simple. Some take a long time; others take place quickly.

Given the complexity inherent in factors potentially involved in strategic planning, I might prefer to call the process *whole system planning*. This gets away from the militaristic term *strategy*.

The task for those wishing to implement a whole system planning approach need to think at high levels of complexity, taking into account factors of uncertainty. This is a challenging perspective in an era marked with rapid, sometimes erratic, change. As illustrated in our practice and in the multiple problem sets confronting most organisations, the issues are increasingly complex. As my colleagues, Warren Bennis and Bert Nanus have observed, . . . *There are many ironies, polarities, dichotomies, dualities, ambivalences, paradoxes, confusions, contradictions, contraries, and messes* . . . .

The following cases describe how some institutions have attempted to respond to the known complexities.

What is common to these cases is the existence of a document in which it is stated, *The world is changing and we must too.* Sometimes that document is written by an individual such as a director or president and is variously entitled *Commitment to focus* or an *Academic prospectus*. These documents contain summaries about changing demographics, economics, politics, and technologies and either propose a set of directions for the future or describe a process for determining direction.

Working parties and teams

In every case familiar to this writer a special, temporary committee or task force has been created by the organisation's chief executive officer (CEO) - the director, president, dean or chairperson.

These committees, or working parties, are usually given specific *strategic* titles, the *Strategic Planning Committee*, or given generic policy titles: an *Academic Policy Committee*. Even when there already exists a standing committee for the *big decisions*, the newness of the strategic concept appears to call for a new group.

The group is usually charged with the responsibility to make recommendations to *carry the institution into the 21st century*. The membership always appears representative of the faculty, usually there are administrative and student members, and sometimes trustees and alumni are represented.

In addition there normally exists an all-campus or similar special session for the academic community in which the CEO charges the committee to deliberate wisely and effectively, to communicate widely, and to finish its work by a certain date. Frequently there is a previous resolution from the board of trustees requesting a report. The committee often goes off on a retreat to get its work underway. Frequently, an adviser from outside the institution is invited to make recommendations on how to proceed, but this is not essential.

Change brings on strategic planning

Most processes begin when there has been a substantial change either within the institution (a new director) or, more often, in the environment: a downturn in the economy, an amalgamation, a threat from a newer competing institution, it is re-accreditation time, or a government department or coordinating board is seeking to redefine missions and roles. In the last instance I have observed the strategic planning approach is usually adopted to defend the institution from the dictates of the government agency or coordinating council.

Most processes undertaken should result in improved strategic frameworks for addressing the future opportunities as well as threats in anticipated environments. The strategic framework, as a minimum, needs to contain a vision of the institution's future, themes to focus attention **and** action initiatives.

Case sketches

The first case illustrates a simple structure and process for getting started with strategic planning; the following case offers more detail while the remaining cases illustrate a variety of approaches, some simple, some more complex. Woven within the cases are descriptions of strategic/contextual planning models.

IOWA STATE UNIVERSITY

A new president. A state needing economic development.

What to observe/learn from this case: This is a very simple model for getting started with the strategic concept: the strengths + opportunities model (Cope 1987). The assumption is that an enterprise's best set of strategic choices (or key success factors) result from a combination of salient strengths leveraged on opportunities.

Note also at least two driving forces in the context (a new president and a governor emphasising the role of higher education in economic development). Also note how the faculty was involved before the retreat, (which was, however for administrators) and how they were then involved at the retreat.

Note also that *opportunities* are defined as conditions *out there* in the external environment. And finally note that everyone was challenged to work toward a strategic framework. A strategic framework is a structure or at least a set of understandings that allows the institution to fulfil its mission while competing successfully for resources in future environments.

Context. Throughout the early and mid 1980s the American Midwest farm economy was in serious decline. Iowa experienced the worst conditions. Iowa State University's CEO, Robert Parks, was to retire after over 20 years as president. During his tenure the enterprise moved from an emphasis primarily on science and technology to becoming a broad-based university. New colleges in business and design had been created, and new institutes with international orientations were created. Iowa State University, for a long time in the shadow of the University of Iowa, was on the move. The question became, . . . *Where are its next moves?*.

Furthermore Governor Terry Branstad was exempting colleges and universities from budget cuts and even proposed adding funds for technology development from a lean State budget. It was 1989.

Process. George Christensen, the Executive vice President, wanted to help the incoming CEO (Chief Educational Officer) get off to a good start. He arranged to have a *one-day*, on-campus, strategy planning retreat for all the 130 or so senior campus administrators.

The retreat day was preceded by a series of hosted luncheon meetings for about 60 faculty members in groups of five or six. They were to come up with what-do-do ideas to *make ISU an even stronger university in the years ahead*. Their ideas were recorded, summarised and presented at the retreat by a member of the faculty.

The retreat began with a slide-show presentation on Iowa's economic position within a global context by two distinguished faculty economists.

The what-to-do-ideas generated from the faculty luncheons were shared next.

The stage was then set for an hour of small group discussions. Half the participants discussed the salient, internal strengths of ISU; half the participants discussed the external *out there*, opportunities. By the end of the morning, tables had been produced which summarised ISU's primary strengths and key opportunities.

One of the primary, salient strengths was clearly the large collection of scientists in the biological sciences both on the campus and working in many government and private laboratories in the near Ames. One of the key opportunities was the worldwide attention given to the potential of bio-genetics.

Lunch

During lunch a presentation featuring case examples of strategic frameworks that had evolved at other institutions such as the Carnegie Mellon University was given. Each case example illustrated how internal strengths were related to external opportunities.

Early afternoon

During the early afternoon the participants returned to their same tables and were challenged to match ISU's salient strengths (where they had a comparative advantage) to the key opportunities. This arrangement sets up a competitive atmosphere in which each table tries to come up with strategic frameworks at least as good as those presented during lunch. The *value* of each framework depended on how well it related to the morning's interpretation of primary strengths and key opportunities.

Late afternoon

During the late afternoon, tables reported on their conception of the best strategic framework for ISU. All participants voted on *the value of each concept* by a show of hands as each was presented. The results were recorded.

A proposed direction for example which was well received involved setting up clearer links between ISU's impressive strengths in the biological sciences and technologies and the state's economic development in a larger world context. Specific examples of how to implement this new direction became part of the reporting process. Such examples included a greater involvement in the International Trade Center under construction in Des Moines, the creation of *international professorships,* and assistance in the Governor's proposal to build a new biotechnology research center - on, of course the ISU campus!

Initial outcome. The day ended with a statement of next steps. A report of the retreat was circulated for comments from the wider campus community describing the outcomes, and included legislative bodies, alumni, and related trade associations. Funds were set aside to implement the highly endorsed strategies. It was envisaged that annual retreats would be held each year to review progress and assess the need for re-direction.

The new president then appointed a professor of economics, Jean Adams, to continue the strategic planning process. That process undertaken with much publicity in Iowa concluded in 1990 with a set of recommendations and plans for implementation. Intergral to the vision was a desire to place Iowa State University as the leading technology research and application university in the Midwest, analogous to placing RMIT as the IT of Australia.

Additional comment:

This case study illustrates many of the practical fundamentals of strategic choice making. There is an *outside* force for change - the governor's urging and the slipping economy. The CEOs are involved and the timeline to initiate planning was short.

While substantial leadership was given by the dean and president, there was also widespread faculty and administrative staff involvement. Note also, a simple model was followed. The process started with the future direction-finding choices based on strengths and opportunities.

CARNEGIE MELLON UNIVERSITY

Keep improving on a viable strategic framework.

What to observe: This is a success story built on adroit presidential leadership. Carnegie Mellon has been innovative and risk-taking. Significant resources were focused in ways that might have been viewed at the outset as speculative. Note that there was a shift over time from the strategically-oriented mind of the president to widespread documentation in the form of *strategic plans*. The vision is combined with two or three themes or *key success factors*. The vision involved Carnegie Mellon becoming a national leading-edge university. The themes were simple: share resources among departments, focus on a key strength, and seek a national reputation.

Context: Pittsburgh's Carnegie-Mellon University was probably the first institution to adopt the strategic planning concept under the hand of the organisational psychologist, Richard Cyert. Cyert became president in 1972. The institution was operating in the red. The university offered a polyglot collection of programs resulting from the 1960s merger of Carnegie Tech and the Mellon Institute.

Process: The strategic planning process began in 1972 with Cyert proposing that every department head submit a strategic plan to the Faculty Policy Committee, a committee appointed by Cyert and selecting the most forward-looking professors.

Departments were reviewed one at a time. By 1974 the Faculty Policy Committee had evolved into an administrator-dominated long-range planning committee, chaired by Cyert. Some departments were closed (education), others cut back (foreign languages), while specific departments were strengthened (computer science) or whole areas of disciplinary focus were strengthened (applied social sciences). Every shift of resources was designed to gain maximum comparative advantage.

A vision of Carnegie-Mellon as a nationally recognised professional university emerged. According to Cyert, *The aim of strategic planning is to place a campus in a distinctive position. We must face the fact that colleges and universities are in a competitive market.*

In the early years President Cyert dominated the process, a process that has evolved to move initiatives away from individual departments. The organisational aim has been to instil a particular way of thinking throughout the institution. Again, according to Cyert, *The key element in strategic planning is to get everyone in the organisation to think that way.*

A strategic framework

Perhaps the most important lesson in the Carnegie-Mellon model is the clarification and definition over time of a *strategic framework*. A strategic framework, mentioned in previous cases, defines how the structure and processes of the institution contribute to how well the institution will play the competitive game.

In the *Carnegie-Mellon model* each department is expected to focus on what it does best and relate that strength to a limited number of broad themes. Thus to provide flexibility, concentrated strength (focus) is linked to these broad themes. For example two broad themes chosen as suitable can loosely be described as *professional application* and *information*. Thus in the psychology department emphasis is given to cognitive processes - how the mind processes information; in the mathematics department applied mathematics becomes the prominent course; computer science and the engineering departments emphasise information through robotics, while the history department has an unusual PhD program in applied history. Strength gives competitive advantage and the application of common themes allow that strength to be shared across departments amongst selected subjects. Themes draw attention.

Related to this concept is the contribution that a concentration of resources within a department can make to its viability. The 1978 Nobel Prize winner Herbert Simon professor of psychology at Carnegie-Mellon in his work on how

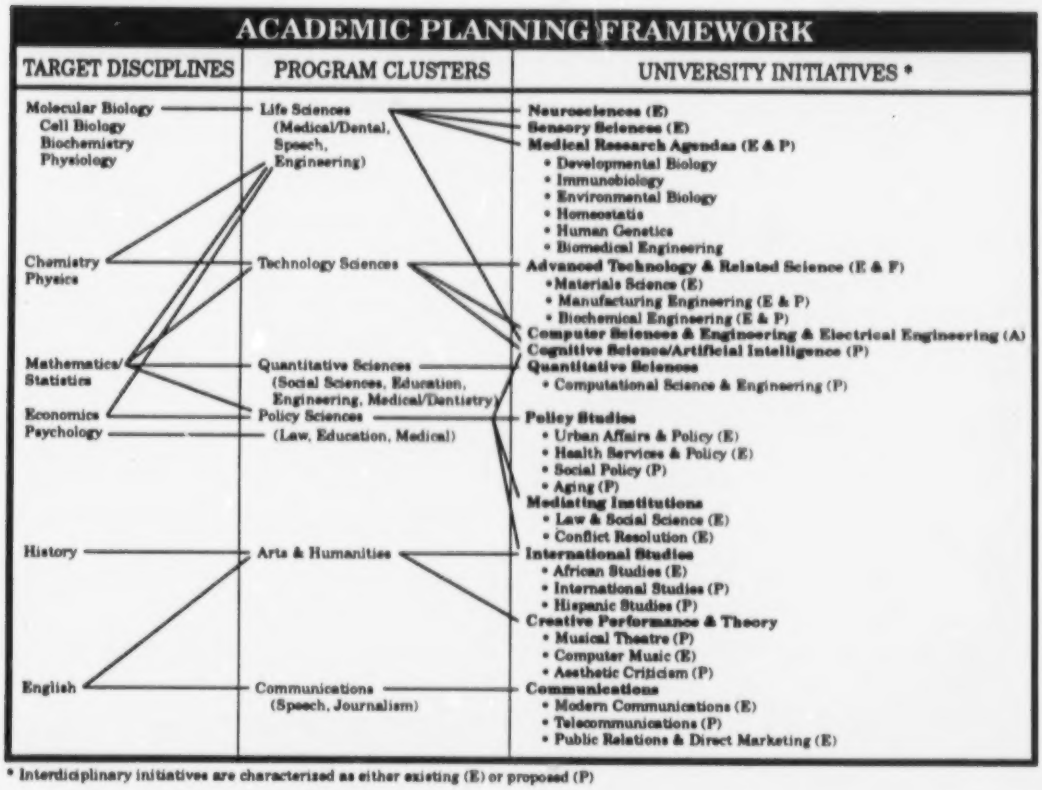
financial institutions process information offers an example of this lateral use of resources.

Furthermore, to give competitive edge to strength and earn distinction, each department is urged to *move early into the intellectual frontiers of tomorrow.*

Finally, the *framework* operates with little or no documentation of plans. Once the strategic spirit is instilled the culture supports it. The only continuing element of process is an annual retreat to examine and re-examine strategies. Each annual retreat focuses on the activities of different stakeholders: the applied institutes, the trustees, graduate programs, interdisciplinary education and research, and so on.

Other institutions have adopted variations of the Carnegie-Mellon strategic framework. The next illustration is one page from Distinctive University's *Plan for Distinction* (a discussion draft). Since this is an internal draft statement the identity of the university is deliberately concealed.

Illustration IV: Academic planning framework of Distinctive University



* Interdisciplinary initiatives are characterized as either existing (E) or proposed (P)

The left of the page identifies particular targeted disciplines. The next column, Program Clusters, resembles the themes of Carnegie-Mellon. The final column identifies specific initiatives. Together these three comprise a framework. A

quotation from the *Plan for Distinction* demonstrates how this university's strategic thinking drives the planning process:

> *Economics is identified as a pivotal social science. It is distinctive for the breadth of its theory and the rigour of its methodology. This unit is already strong at xxxxxx and contributes to work in the professional school of management, as well as policy-related research and education. It also affords a framework for collaboration with law, education an... ...ial policy, and medicine.*
>
> (Internal document)

It is significant, that one of the schools at this university set out (about 1984) to become the most highly regarded school of its type. It achieved this distinction in 1989.

At this point the reader may have some questions regarding some terms frequently bandied about. These definitions are suggested to give some consistency to the language of planning across institutions regarding mission, vision, themes, historical perspective, leadership, and so forth.

MISSION, VISION, THEMES, LEARNING

Mission (as reviewed in step one) is the *present* purpose, position and strategy of the organisation. Mission results from the *current* mix of strengths, commitments, opportunities, and competitive forces. For the currently successful organisation, mission is the wisdom of today.

While mission occupies a prominent location in the basic two-part model presented earlier, it is not fruitful to begin a retreat designed to determine strategy or longer process with a review of mission. Most of the time, mission statements are simply innocent pieces of fiction wrapped in elegant words. Consider a mission restatement - if at all - after new *directions* are tentatively decided upon. Then determine whether the new initiatives (if any) require any change in mission.

Vision and themes provide **future** direction. Vision grabs attention. Vision is the combination of strengths related to opportunities projected forward. Visions and themes provide road maps that guide implementation through what may be a tangle of complexities. Vision and themes set the agenda. Vision inspires, animates, and transforms mission into action. Vision is conceptual glue. The right vision and themes (sometimes called *key success factors*) sweep energy back and forth in subtle ways.

Learning. The way I deal with strategic planning is to emphasise that it is a learning process. Participants develop a wider and deeper working knowledge of their organisation and eventually the institution as a whole through the increased capacity of its staff to think strategically builds a strategic framework of the best course of study, fees, certificate and degree options, locations, themes, and so on, along with a culture of strategic thinking.

This is institutional learning. The participants learn a conceptual approach and a knowledge organising framework for focusing on a variety of variables in

a given situation; they can generate and redesign strategic solutions. They learn what to focus upon and learn how to determine strategic direction consistent with mission, strengths, competition, and the organisational culture.

Historical perspective. And furthermore, an accurate learning process is reinforced still further if the process is couched in a historical perspective. As there is much to learn and much to choose from among contemporary events, the organisation's history or a department's history adds perspective. History gives a view of organisational development that is more accurate than the one gained by seeing such matters only in the present. The participants need a broad canvas to account for the past and to project well into the future.

It is often recommended therefore that a strategic planning retreat begin with a slide show history of the institution; include old pictures of buildings, students, employees, laboratories, locations, and so on.

Then the process can begin with either mission review (if it is not simply a fiction), or an assessment of strengths.

Finally, about leadership. The strategic plan leader is one who realises that the plan is less important than the collective sense of purpose. This leader relies on history and on intuition. The strategy of the many organisational actors is then based on layers of values and interpreted realities. Initially these values can only be known tacitly by the participating actors (faculty, administrators . . .).

The contextual leader elects to make the actors themselves the primary data-gathering and information interpreting-instruments, because the actor-as-instrument, although not perfect, is infinitely insightful and adaptable. The result is a strategic framework that is consistent with the realities and values of the participants.

A CHECKLIST FOR STRATEGIC PLANNING:

Preplanning

- A document describing the history and current situation of the organisation with an emphasis on anticipated environments is essential. It should be widely distributed.
- An external body should endorse the need to plan strategically.
- The chief executive officer (CEO) needs to demonstrate that the process will result in guidelines that will determine how resources will be shifted.

Content

- Focus on opportunities in the challenges of the external environment.

- Separate external strategic choices (vision and themes) from internal operational decisions (the faster decision process and institutional quality assurance).

- Concentrate on a limited number of strategic choices. Reduce complexity by recommending that groups focus on pairs of ideas. For example, move internationally and decentralise, or emphasise selected themes linked to stronger departments, link computers to biological systems, and so on.

- Emphasise the qualitative proposed directions over quantitative goals during the planning phase. To assure quality performance, emphasise quantitative results.

Process

- There must be a continuing and visible commitment by the CEO.

- Staff at all levels and from all functions should be involved.

- Provide a modest structure as shown in the simple models illustrated in the previous cases.

Content of process

- Move meetings to retreat settings. Most large scale, big picture considerations require new perspectives. If the setting is close to the campus the thinking will be restricted.

- Focus on directional choices, on vision-theme frameworks, rather than on specific outcomes. The directional choices or the strategic frameworks provide longer term utility beyond particular goals.

- Recognise the professional ethos of the organisation's culture. Allow participants to learn about that ethos as groups learn together.

- Communication must remain constant, clear and entirely open. Allow the discussion to become larger than the agenda so all interests can be heard. Allow all issues to come out. However, if an issue gets in the way of the process, assign it to a working party.

- Present the same information in different ways to accommodate different styles of perceiving. And keep the numerical information to a minimum at the beginning of the process.

- Recognise that while groups are usually more effective than individuals in generating sets of ideas, individuals are often more effective integrating those ideas in a single vision.

- Identify *quick starts* and provide for annual reviews.

Outcomes

The process should result in the organisation's clearer understandings about:

Clientele: What needs of the potential stakeholders, including students, firms, other institutions, graduates, government, and so on, will be met? It may be useful to do a stakeholder-by-stakeholder analysis of benefits received by both the organisation and stakeholder for the vision and each theme.

Program mix: What range of educational, training, service, research and economic development offerings will be available under a newer vision. List them.

Geographic service area: The region(s)/catchment served is more clearly known.

Comparative advantage: What position(s) will the organisation occupy in the market-place? This should be defined particularly in regard to its strengths or special advantages relative to other tertiary institutions.

Basic mission: The role and scope of the organisation incorporates all of the above. The mission should be reviewed for any changes **after the process of strategising is completed**. This action will allow more likelihood for any change to be contemplated wisely.

A mission or vision statement consistent with what has been suggested so far in this book should:

- differentiate it from other organisations;
- define where the organisation is going rather than where it is;
- be inspiring; and
- be able to be disagreed with.

Statements about *maximising growth potential*, or *providing an education of the highest quality are givens and are not worth restating*.

Finally, the result of a strategic planning process should provide the participants with the glimmer of something perhaps improbable, surely difficult, and maybe even remote.

ADVANCED STRATEGIC THINKING

This section is an elaboration and expansion of the principles presented so far and as such is *advanced* thinking.

Differentiating *where* and *how*

At the simplest level, and as pointed out earlier and elaborated on here, there exists the need to be clearer about the distinction between *where* and *how*.

Incidentally this distinction is more frequently made between the terms *what* and *how*. The term *where* is more in keeping with the **direction-finding** planning concept. Turning to the earliest application of that fundamental difference consider an analogy with Aborigines as food gatherers: *Where* is doing the right thing by stalking animals, sometimes collectively to obtain food; this is resource gathering. Carefully carving boomerangs around the fire and experimenting with each boomerang's flight pattern in camp is a *how* activity, doing things right.

The organisation's CEO (chief executive officer) focusing on cost containment, the government department focusing on reporting requirements, and the firm stressing the cost of production, are all carving and practising with boomerangs. There is no question about the importance of quality boomerangs. Just to concentrate on boomerang carving and practice throwing, however, leads to starvation.

A compass as metaphor: pathfinding

Professor Robert Hayes, of the Harvard Business School, makes a related point. In criticising the approach of industry to strategic planning, he uses the metaphor of a compass. The compass is direction pointing. The environment is a swamp. The organisation finds its way by determining a direction of travel through a swamp. A similar analogy can be found by comparing the differing planning approaches adopted by Captain Cook and the organisers of *Cook's Tours*.

The Cook's Tour defines a precise schedule on a well-defined route; it moves in an orderly progression past known landmarks. It aims to avoid contingencies and the unknown and to structure planning in a scheduled, ordered, and routine manner.

On the other hand, the Captain Cook model incorporates a sense of adventure in the exploration of new planning frontiers. Captain Cook had a clear sense of context, direction, and goal, but the actual course was frequently unknown.

Hopefully, the adventure of the organisation and its leadership will not be like that of Burke and Wills.

Positioning

Whether the topic is planning models, organisational models, systems of strategy, strategic leadership styles, or some other paradigm in the jungle of organisational and management theory, it is important to identify a viable perspective or set of perspectives from which to work. Positioning therefore is frequently offered as a means to integrate strategic thinking. Positioning is a simple, yet powerful construct.

Positioning is advanced as an important perspective to determine what must be done relative to the environment in order to acquire the resources that contribute to the *bottom line*. There is an important bottom line question easily overlooked when undertaking strategic planning: *How do organisations acquire resources?*

According to most of the business literature, they position themselves favourably. They find the right niche. Every enterprise exists in an environment that has technological, cultural, social, demographic, and physical elements to which it must adapt. Survival depends on resource gathering in that environment. Effective resource gathering depends on **positioning in that environment.**

Illustration V (a): Defining position along three dimensions

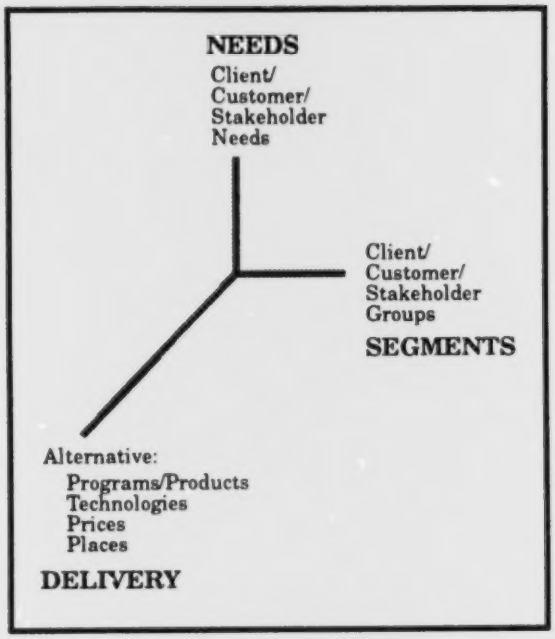


Illustration V (b): Joint-space map of market positions

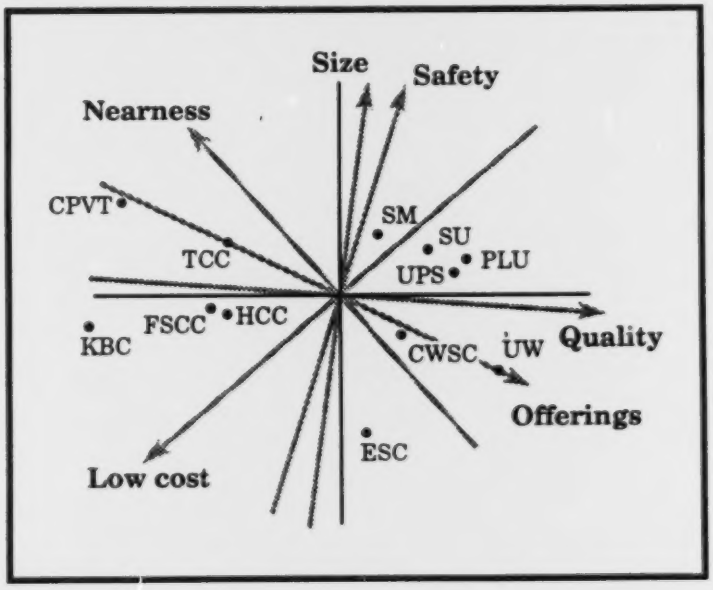
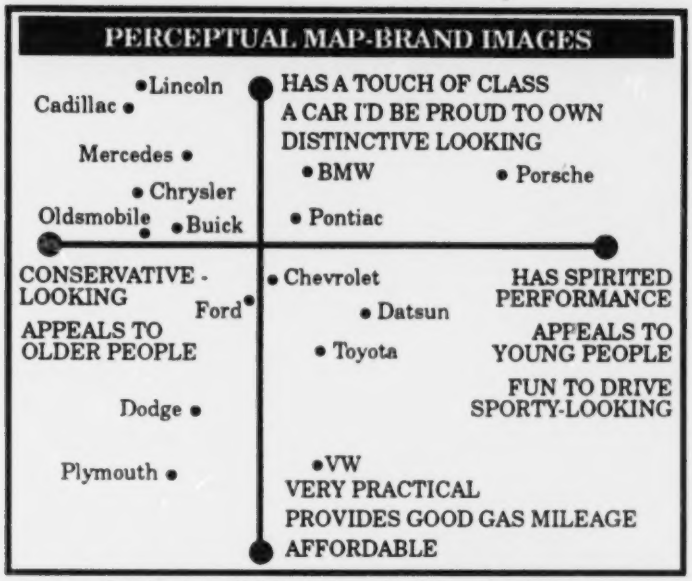


Illustration V (c): Product positioning



Sources: Chrysler Corp., Wall Street Journal and Journal of Business Strategy

Positioning in the three dimensional space illustrated by the figure is a matter of coalignment among needs, segments, and alternative services, products . . . Needs are those things people desire from sex to security. Groups are segments of society from embryonic status to those requiring hospice care. And alternatives are those programs, products, services, prices and technologies employed to fulfil needs.

Positioning in tertiary education's increasingly competitive market-place is illustrated by a marketing study of competing colleges in the Pacific Northwest (USA perspective). See illustration V (b). US, PSU, PLU shown in the upper right corner of the illustration are close competitors for students. The University of Washington (UW) in the lower right is almost alone: it has no local close competitors for students. With another set of variables, say, adding an excellent reputation for most forms of research, UW would still stand apart from this set of competitors; however, if the 'playing field' is national or international, then the competitors and form of competition change.

Using this form of analysis, an organisation deciding to give greater emphasis to quality, or to community service, or to economic development, or to closer ties to particular industries makes a strategic choice consistent with a direction of travel in the chosen environment resulting in a repositioning.

This organisation then has chosen a *direction* to keep itself favourably positioned relative to potential resources and consistent with mission attainment. The University of Adelaide, ANU, Harvard, the California Institute of Technology, the Sydney Technical College and so forth, all maintain positions in the market.

In world business, Sony and Panasonic position themselves as technology leader and technology follower respectively. Ford positioned itself early as an international automobile firm, getting a positioning jump on GM, which Ford maintains with its *world cars*, the Escort and the Trader and its newer designs. And so it is with the divisions of any enterprise. IBM competes with dozens of clones in the PC end of the business and with Digital Equipment, Xerox and a few others when it comes to large, integrated systems.

Case example:

BROKEN HILL PROPRIETARY (BHP)

The strategic moves during the early 1980s of Australia's largest industrial firm provide a good example of the strategic conceptual framework about which this book is concerned. As most Australians' know, Broken Hill Proprietary (BHP), originally a mining company, was founded in 1885, and by the late 1970s had entered steel-making, mineral exporting, and oil and gas production.

Despite the increasing variety of *product lines*, BHP's 70,000 employees and functions were tightly, centrally controlled. Its *proprietary* company culture, not unlike some TAFE institutions, was conservative, technically oriented, internally driven.

In the early 1980s, the increasing world competition, particularly in steel, was resulting in large operating losses. Furthermore BHP, with eight to ten billion in annual sales and operating in a nation the size of the United States with the population of the state of Illinois, was clearly outgrowing Australia. In addition, its resource base in Australia was being depleted.

By 1984 BHP had made several strategic moves to adjust to the environment. It responded to Australia's finite natural resources and the pressure of world competition by international expansion; it made acquisitions in North America such as Utah Mining and Monsanto Oil.

BHP responded to the speedup of international competition and changing technologies by decentralising operations and by shifting the previous emphasis on control systems (cost analysis) to support systems (market research). BHP became an international resource firm.

Illustration VI: Strategic shifts at BHP

Finite resources	--	International expansion
Restricted market	--	Market competition
Technology driven	--	Market driven
Cost emphasis	--	Profit emphasis
Control systems	--	Support systems
Centralised functions	--	Decentralised industry groups

The conservative, technically oriented, and internally driven culture was changed. New hiring patterns were instituted. The hiring shifts gave more emphasis to younger managers who were less technically oriented, more often from outside BHP, and more often filling planning and marketing roles. BHP decentralised and internationalised. BHP moved externally and realigned internally.

This change was preceded by strategy workshops focusing on external surveys of the shifting markets and the competitor's moves. While not an immediate problem in the same way for the state and commonwealth supported institutions, it became obvious that, for BHP to survive, it had to change.

BHP's external moves returned it to profitability; the fit with the environment improved. BHP's internal adjustments supported the external strategies; the adjustments were structural (decentralisation), technical (market research), and cultural (new attitudes).

These examples are given to demonstrate that positioning is both macro and micro. An organisation's positioning relative to the environment is macro. An educational institution's departments would have micro positions to occupy. Macro and industry **environments** are seen to parallel macro and micro **positioning** aligning the organisational structures to support the institution's chosen environmental position. This is **shaping** the organisation.

A restatement of several key principles:

- Organisations acquire all resources from their environment, and to acquire resources they seek to position themselves advantageously.
- Planning for an enterprise is an expression of leadership in whole system design.
- Strategic planning *moves* and strategic management *shapes* the enterprise.

Satisficing and loose-coupling

As tertiary education institutions tend to be democratically governed, control is neither complete, nor considered desirable. Since they are democracies, and given the complexity of whole system planning in changing environments, together with the diversity in individuals, they understand that the most any institution can expect is to *satisfice*. *Satisficing* is a useful term coined by the Nobel Prize winning professor, Herbert Simon, to describe efforts to attain some level of satisfaction that is less than perfect. To satisfice is to do *well enough*. As the Australians say, *She'll be right, mate*. That is, don't worry, it will be good enough, as far as strategy is concerned, but not total quality!

As will be recalled, Winston Churchill was more philosophical than his down-under cousins when reflecting on the differences between democracies and

totalitarian regimes. Churchill concluded that democracy, with all its problems, was simply the best of all possible systems.

The satisficer's orientation is much like the political notion of the *art of the possible*. Achieving near consensus on the purposes of a TAFE institution, given the reality of divergent professional orientations (read also, egos), is achievable only if the purposes are believed desirable and feasible, and - if there is a shared view of *what is out there*.

And given (1) the diversity of professional orientations within tertiary institutions, even those with reasonably well-defined missions, and given (2) the volatile possibilities in the ecosystem, it is positively desirable **not to** have too closely-coupled people (as some of our theorists call them) or structures. A prison is closely-coupled. Structure is tight. Control is complete.

A certain amount of loose-coupling and diversification among staff and within the structures of the kinds of organisations addressed by this book should permit simultaneously divergent efforts. That diversity offers greater possibilities for the organisation to respond innovatively to a shifting ecosystem.

Is the strategic concept equally useful for any tertiary institution?

While the following comparisons may appear over-stated, they are designed to make an important point: that the strategic concept is not equally useful in all organisations.

Compare the strategic issues of an automobile company like General Motors with those of a sheep farmer and a state prison. The sheep farmer's 2,400 acre sheep station is located in south west New South Wales. He has about 1,500 sheep. General Motors, still the world's largest industrial company (annual sales about 100 billion) with over 750,000 employees, makes about 7,000,000 automobiles annually. The prison restrains about 1,200 inmates.

While there is a difference in size, size is not important with regard to what is or is not strategic. The first consideration is still the environment.

GM operates in a global industry that is operating at 80 to 90 per cent of capacity. GM can build more cars than it can sell. The sheep farmer is in a global industry too but at the moment he cannot sell as many sheep as he can produce. The Walla Walla Prison is like the Australian sheep farmer, already over capacity.

GM faces two environmental issues: worldwide over-capacity and, evidently still at the time of writing this (1991), declining interest in buying GM cars. GM is responding by slimming down production (largely an internal adjustment), by cutting middle management (an internal move, years overdue), and by coming out with new models to escape the impression GM cars are all made with the same cookie cutter - an external adjustment.

Because the sheep farmer does not interact directly with the final consumer of his sheep, he simply has to take the price available at the time of sale. His

primary drive is to make his land productive by clearing the bush and forest, planting the right grasses, moving sheep to the right pastures, and keeping them healthy.

The prison, not so simply, finds places for those sent by the courts. Neither the sheep farmer nor the prison can reposition themselves. They have no **external** strategy to consider.

GM can redesign, change prices, change locations, change models, and decide on various promotional techniques to sell GM cars. GM can control the primary strategic variables:

- price
- place
- product; and
- promotion.

And so it is with the diversity of tertiary institutions. The private Bond University can control its own fees; my university, the University of Washington, cannot. Some law makers in Australia and in the States would limit the number of out-of-state/country students, others do not. Some institutions are constrained from offering new degree programs or presenting the older degree programs in new locations; others are not.

When an organisation has control over pricing its service, its location and its program/product mix, it will find the strategy concept more useful (high applicability); that institution will have more *strategic* power; it may decide more of **what** to do and **where** to go. With little price, location, or program flexibility an institution has little opportunity to strategise; its options are more managerial and are likely to have to focus on matters of quality and efficiency.

Illustration VII: Application of the strategy concept to organisations

LOW APPLICABILITY ..... **HIGH APPLICABILITY**								
Walla Walla Prison	Division of Vocational Rehabilitation	Central Missouri State University	Tahoma Industries	Department of Special Education	Fontbonne College	Millikin University	Weyer-Haeuser Company	Lawry Pastry Shop
EFFICIENCY/HOW				EFFECTIVENESS/WHAT				
NO/OR LOW PRICE FLEXIBILITY	.....							HIGHER PRICE FLEXIBILITY
NO/OR LOW LOCATION CHANGE	.....							EASIER CHANGE OF LOCATION
SERVICE PRODUCTION FIXED	.....							PRODUCT/SERVICE FLEXIBILITY

CHAPTER TWO

SPEEDIER DECISION-MAKING

INTRODUCTION TO THE BASIC POINT-OF-VIEW OF THIS CHAPTER

All institutions are benefited by speedier decision-making by CEOs, academic administrations and all staff at all levels.

This chapter offers evidence and guidelines from (1) research, from (2) case studies, and from (3) quotations. The chapter contains principle-level prescriptions and operational specifics.

The thesis is simple and self-evident but easily missed. Today windows of opportunity open and close more quickly than they did in other recent times. Those organisations not responding rapidly may miss opportunities.

While it is not, within an educational institution, as it might be for a business in a more competitive environment, a respond or die situation, speedier decision-making is more important as competition, driven now more by market forces, increases. Tertiary educational institutions cannot discount the effect of competing private providers, employers, schools, and other educational institutions.

Faster action is the key to competitive advantage today. Faster decisions, simply, mean staff, curricular, and facility resources need to be marshalled quickly.

The notion of speedier decision-making is recommended and supported by variations of these six research and experienced-based principles of action:

- instead of trend data, maximise real-time data;
- instead of a careful consideration of single alternatives, investigate several more complex alternatives simultaneously;
- instead of relying on a senior management team, create more multi-tier, advice-giving processes;
- work for consensus, but don't wait for it to materialise;
- use advisers; and
- integrate decision-making through a shared vision.

It is suggested that the application of these six action principles develops three long-term strengths: (1) an organisation's collective intellect, (2) smoother working executive and staff teams, and (3) the CEOs personal capability.

Because speedier decision-making has not been a feature of administration within public tertiary education, nearly all the examples and research are taken from the private sector.

This chapter also includes *best-in-class* case examples from leading firms that might provide ideas or models for educational organisations. These cases illustrate the principles in use. Quotations, quick starts, and first steps are also given.

The inclusion of lively quotations is designed to highlight and emphasise the principles.

> *It is the most competitive companies who are the quickest to take advantage, and use their resources globally. Those who are left behind may never catch up.*
>
> L. Patrick Lupo
> DHL Worldwide Express

> *Nothing endures but change.*
>
> Heraclitus

Yes, change is the only constant.

The action principles are given practical expression by the following, quick starts and first steps.

Quick starts are short-range, thus, they could begin now, tomorrow or at most within a week, and are simple. *Use coloured memos for immediate action items.* Some plans are longer-range and complex. For these *build self-managing teams.* The latter are described as first steps.

> *The uncertainty of the future has always made me look upon plans that need considerable time to carry them out as decoys for fools.*
>
> Jean-Jacques Rousseau
> *Confessions*

> *Common sense in an uncommon degree is what the world calls wisdom.*
>
> Samuel Taylor Coleridge

WHY FAST IS ESSENTIAL

What do McDonalds FAX machines and TNT have in common?

> Answer: Speedy response.

Introduction

Globalisation, demographic and value changes, technological discoveries, and accelerating competitor moves, all serve to increase decision complexity while creating conditions for making faster decisions more necessary. These then are the perfect conditions for high-anxiety executive burn-out and when the choices involve high risks, businesses fail because of either wrong decisions or indecision. Although not facing an immediate failure, educational organisations may benefit from considering means to increase the speed of institutional governance and administrative decision-making.

It is also contended that many management practices believed to advance institutional performance are a hindrance to top performance. For example, once-a-year, long-term, forecast-based, strategic planning, if done at all, or techniques such as zero-based budgeting or performance-based budgeting systems. Greater centralisation and administrative control often advocated to enhance decision-making as well as consensus-driven working parties or teams may have a similar slowing effect.

Most of my evidence is taken from high technology firms, particularly computer manufacturers and software firms. These firms provide good examples of flexible, fast moving, open organisations. Internally, they are often driven by projects and program structures that are temporary and easily rearranged. There is considerable job mobility, both within and among firms. Thus lessons learned are diffused quickly.

Other characteristics of these firms are worth noting: sales and service staffs are usually small; they maintain close relationships with clients so new needs are identified quickly. There is a vigorous trade press and equally vigorous user groups providing continuous critical feedback on their products and decisions. Employers of tertiary students provide the same feedback function.

There are clearly some important differences too. Security analysts are particularly watchful because bankruptcy strikes quickly in fast moving industries.

Because of the nature of the competition among business firms it is often true that managers are chosen who can assimilate great quantities of information because of the need to respond quickly to new product demand, new project teams, and the new structures necessary to implement to new situations.

Quick response to new situations is critical among more than just high technology firms. Goals in the international market-place will become increasingly transient. And despite GATT, and various bilateral Free Trade Agreements, and the decline of Eastern Europe as a military threat, government economic policy worldwide will also continue to be unpredictable.

The technology required to participate in business manoeuvers and to win wars will intrude more deeply in the market-place. Demographic and value shifts will preclude accurate predictions of demands for skills and graduates.

> *Consumers in the Pacific Rim in North and South America and in Europe want the option of buying each others goods - and they want it now.*
>
> Fred Smith, CEO
> *Federal Express*

Successful management coaching throughout the 1990s under such turbulent conditions requires more than the usual ability to assess a situation quickly and change strategies under conditions of uncertainty. Firms wishing to be successful in most, perhaps all industries, may have much to learn from the game plans of high performance and high technology firms that have been operating in high velocity environments since the invention of the microchip.

These firms will continue to need graduates to work in these environments.

Australia and international trade

While my evidence for urging faster decision-making within tertiary institutions is frequently illustrated from high technology firms, the message may nevertheless be broadly applicable to Australia in terms of her comparative advantage in world markets. Simply put, Australia like America may only gain competitive advantage in high quality, value added innovative product ideas and faster implementation of production or service and faster response within world markets.

The findings of best practice among these particular firms appears to relate to most/all types of organisations whether in business or in the public service.

This section of the book is therefore an inside look at the decision-making practices of the more successful high technology firms and presents a set of propositions to increase the awareness of, and the practices leading to, faster decision-making.

While I believe they are broadly applicable, these six principles are especially applicable to firms delivering high-reliability products in very fast-paced environments, i.e. the high technology firm.

For the purposes of this chapter, high technology firms are generally microcomputer, biotechnology, aerospace, and similar enterprises. Research and development functions of many firms would however qualify and even, as will be pointed out later, firms in the fashion industry, as well as banks, lawn care, recreation, and so on. These are the firms educational institutions are aiding by their own practices.

By management practices, as was demonstrated in the last chapter on strategy, I refer to decision-making dynamics, organisational structures, planning, strategising, communication, rewards, teamwork, flexibility, participation/involvement, analysis, use of information, and conflict resolution, mostly the people-oriented matters. There is less attention to such *non-people* matters as curriculum design, finances or producing numbers of certified graduates.

Higher speed - higher performance

> *The only competitive advantage is moving quickly.*
>
> VP Finance
> Computer Firm

In the so-called high-velocity environment of the 80s and 90s a significant proposition regarding what contributes to institutional effectiveness may be advanced. It is that organisations should be able to **make both strategic** (as defined earlier) and **programmatic decisions faster**. With capitalism becoming the global economic norm, with the unification of Europe, and with the development of the Pacific Basin from California and British Columbia to Korea, Sydney and Singapore, innovation has become a global race. All the

world markets now constitute one considerably faster moving economy. And the actions of tertiary education institutions can contribute substantially to Australia's effectiveness in this faster world.

The future just ain't what it used to be.

Yogi Berra

While this book addresses modern management conditions, the principle of speed is timeless.

Quickness, flexibility, and speed have long been hallmarks of military strategy. The leading French military strategist, Beaufre, had this to say about classical military strategy: *One of the most important factors in classical military strategy has always been the ability to grasp the changing conditions of warfare faster than one's opponents and hence being in a position to foresee the effect of the new factors.*

Long ago, about 2,500 years ago, Sun Tzu, frequently regarded as the first person to write (on bamboo sticks!) about the strategy concept, had this to say: *Appear at points that the enemy must hasten to defend; march swiftly to places where you are not expected.* He also advised, . . . *Let your rapidity be that of the wind, your compactness that of the forest. In raiding and plundering be like fire* . . . Finally, reflecting on a permanent condition in competitive environments, he warned, . . . *Just as water has no stable form, so there is no permanent condition in war.*

Even the early success of the Roman Empire was largely attributed to speedy response via the Roman roads. They stretched into key strategic locations. This allowed a Roman Legion to move men, animals, and material as far as 35 miles in a single day!

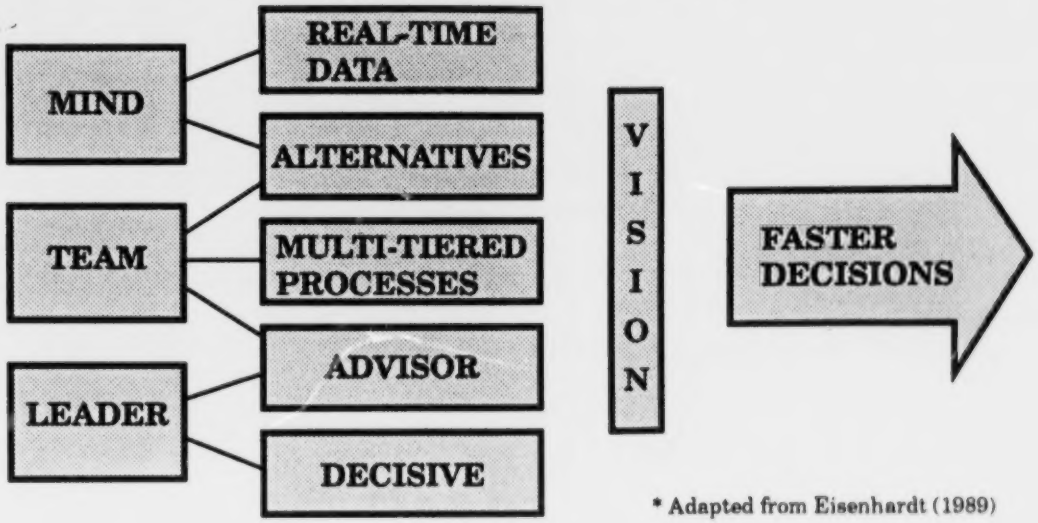
Size, strength and a long history in the market are not enough to survive. As the dinosaur proved, it's not necessarily the biggest or the strongest who survive. Take for example the problems of General Motors, IBM and even BHP at the turn of the 1980s. Those firms who adapt first prosper.

The basic models which explain the principles of faster decision-making are shown in Illustration VIII. The (a) portion of the model illustrates interactions improving the minds of decision-makers, the team processes and the capability of the CEO. The (b) portion of the illustration shows the process facilitated from choices to evaluation.

The remainder of this chapter addresses the principles one at a time and are presented to aid an organisation contemplating the adoption of some or all the principles in order to enhance the speed **and quality** of decisions. The word *organisation* will be used to designate institutions, or firm or bureau, or department. The *organisation* is a collective of people working for some shared purpose.

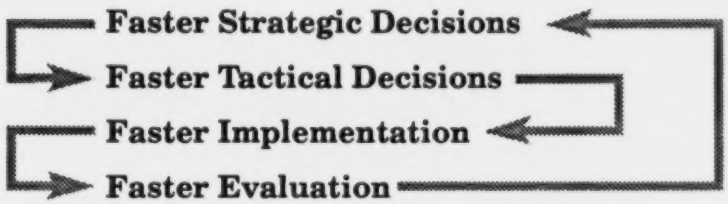
Illustration VIII: Faster decision models

(a)



* Adapted from Eisenhardt (1989)

(b)



MIND

Action principle 1:	**Maximise the use of information and in real-time mode**

Real-time information is information about an organisation's operations or environment for which there is little or no time lag between occurrence and reporting. Hard, immediate data, such as bookings, scrap, inventory, cash flow, engineering milestones, measures of customer satisfaction, competitors' moves, and so on, is preferred over trend analyses. Continual real-time information is built into intelligent technology - from optical scanners in stores to immediate phone-in public opinion polls.

From the Stanford study of eight microcomputer organisations, Kathleen Eisenhardt found that among more successful organisations, hard data are examined extremely frequently and in great quantities. It appears to me that the acceleration of real-time information leads to continually more acceleration. Here we are talking about raw data: the bar code on a box of Weeties, the transmitters on meters, in planes, ships, and trucks, the bank's ATM, robots in space, and so on. All provide accelerated information in real-time speeds.

When, for example, a firm is experimenting with a new product or a new production process, rapid sharing, of every bit of information as fast as it is

accumulated, is a precious activity. Tom Peters makes the point that the normal pattern must be to test, adjust, try again, modify, start over, measure everything, and post results where everyone can see what is happening. He uses First Chicago Bank as an example of encouraging the sharing of real-time data. In this case, most of it is performance data from a quality improvement program. Working with customers, the bank developed some 700 performance indicators at its many locations.

Immediate, real-time information includes what might be garnered on a day-to-day basis from careful listening to front-line personnel by the CEO who gets first hand information about why things work or don't work rapidly. There are at least two benefits. As Tom Peters observed, . . . *This little listening device, repeated regularly, will unfailingly yield strategic insights*. The mere process of immersion in immediate information improves the cognitive capacity to handle information. Ideas crystallise, new opportunities present themselves, problems disappear, and good decisions become easier to make.

Real-time information is the practice of each Lexus employee in the US calling at least one Lexus owner each week. Mazda Chairman, Yamamoto, calls this *kansei* engineering, knowing first hand both the emotion and reasoning of customers.

Microsoft and Bill Gates

Bill Gates, the youthful, billionaire, founder and CEO of Microsoft, is a prime example of managing by getting involved with front line personnel. He is reported to spend half his time managing by walking around, seeing who is doing what. He is particularly fond of showing up when individuals or teams of programmers are brainstorming new products. He listens; he gets involved. As he puts it: *No doubt the company would do well without me at this point, but I like to think the Microsoft clock runs faster because of me.*

He gets involved in immediate information too. He frequently checks the math in handouts at meetings and even the numbers in slide presentations.

One additional way for keeping the data close to the user is facilitated by Microsoft being highly decentralised into about a dozen small business units. These units are largely made up of programmers and marketing personnel, driven by the details of computer programs and market data. Because the units are small, sometimes employing fewer than 50 personnel, Bill Gates is easily able to sit around a single table with key staff while sharing ideas. These units are constantly bombarded with every conceivable comparative measure from computer/software speeds to technical sophistication. Each unit is responsible for knowing as much as is public about each of its competitors. They are expected to do their homework, day in, day out.

Bill Gates is accessible too. Everyone is connected through the organisation's electronic mail system. Everyone throughout the organisation is urged to respond to their *E* mail that same day. Bill Gates models this behaviour: he tries to respond to each of a dozen or so messages the same day he gets them.

In the post-industrial society the central problem is not how to produce efficiently . . . but how to organise to make decisions, that is, to process information.

Herbert Simon, 1978
Laureate in Economics

The image of information use is enhanced by thinking of the bench scientist remembering the example of the First Chicago Bank given by Tom Peters: test, adjust, test again, modify, test again . . . always immediate, real-time data.

Why does the use of real-time information speed the decision process? There are three reinforcing answers:

- **Early identification of an issue or problem or opportunity.** Executives and staff are able to spot problems and opportunities sooner. For example, at staff meetings where lower-level personnel describe what is happening on the production line, or sales staff report on fresh inquiries. In this way surprises good and bad are reduced. While strategies applicable to the business forum are used here and throughout the chapter, the intention is to promote the application of these techniques by educational personnel for the benefit of their institution.

- **The powers of intuition are enhanced.** This explanation is a little more subtle. The mind, the brain, is like software in a computer, but it acts like a G-bit hard-disk. It has been demonstrated that the mind assesses the body's need for health-giving hormones and then sends messages to cause their manufacture. Similarly it combines information into patterns to make decisions that have that *gut feel*. In some academic circles, this *gut feel* is what is called artificial intelligence. This intelligence is real, not academic. Real intelligence, what we call wisdom, is developed through continual exposure to countless actual events. Thus managers continually responding to real-time information are developing their intuition.

- **Group performance is enhanced.** Frequent reviews of real-time information give an executive team (administrators or teaching staff) experience in working together in high pressure situations, so when they need to respond rapidly they have already developed the social routines necessary for smoother group functioning.

Computerised information

There is a warning I need to add about computerised information. There are many consultants and computer science people in our organisations that would have us believe that computer modelling of decision-making is desirable. I do not support their view.

Jeff Kottemann, at the University of Michigan, says, . . . *The computer model as a decision aid allows people to look through a lens to view a problem. They are designed to help in planning and forecasting.* However, he finds that these programs are not always helpful, in fact his research demonstrates that worse decisions are made using computerised aids, when those aids are used as *what*

if forecasting aids. What surprised him most, what was most alarming, was that those using computerised aids **believed they were making better decisions** when their competitors, using only experience and intuition, were better able to predict the future. This is the same thing that happens when people pick their own luck in a lottery, *They feel they are in control.* He also says, *Some decision aids encourage short-term strategies, while the actual business environment favours longer-term planning. In the long run, short-term strategies may cost a company more. The wild changes in strategy needed to compensate for a lack of long-term planning can spell death for a company.*

I have observed that computerised aids will too often help naturally slower decision- makers stall even more. All too often heavy information compilers are over used by bureaucratic planners who always need more information. Why? To be in control.

Forecasting, with or without the computer

Why forecasts are frequently, nearly always wrong, confounds experts who use their great intellects to examine trends, extrapolate from the past into the future and with great precision determine factors that may change those trends.

The problem with forecasting is that we do it with an assumption that **we should know is false**, that things will continue to happen as they did in the past: decision-makers will intervene; the environment will change.

> *I have trouble forecasting the day after tomorrow.*
>
> Jack Valenti, Pres.
> Motion Picture Society of America.

Forecasts make predictions, but these predictions are never realised because intelligent people intervene. For example, Russel Ackoff, tells of the projected paper work to be performed by the Federal Reserve Bank of Cleveland. By the year 2000 it was forecast that the space required by people to process and store the paper would exceed the commercial space available at that time. He says, *This 'revelation' helped spur the development of an Electric Funds Transfer System . . .*

Moreover, when a trend in today's world is well enough known to be built into a memorandum, or a presentation or a report, it is already too late, as the market is already lost.

As Charles Schnider of GTE (like Telecom Australia) commented to me all the potential trends and conflicting scenarios leads to *analysis paralysis.*

Henry Mintzberg, reported it this way in the *Harvard business review*

> *. . . it is interesting to look at the content of the manager's information, and what they do with it. The evidence here is that a great deal of the managers' inputs are soft and speculative -*

impressions and feeling about other people, hearsay, gossip, and so on. Furthermore, the very analytical inputs - reports, documents, and hard data in general - seem to be of relatively little importance to many managers.

He goes on to describe a particular event

After a steady diet of soft information, one chief executive came across the first piece of hard data he had seen all week, an accounting report, and put it aside with the comment 'I never look at this'.

Information and organisational purpose

Now, about organising the real time data from a strategy perspective:

With the widespread introduction of organisational theory and the strategic management concepts into enterprises during the 1970s, the need for an additional perspective on information requirements became evident. The technically oriented information requirements of the 1960s and early 1970s were being supplemented by *managerially oriented* systems. As I and many others have pointed out, it became clear that the information required for strategic purposes available to institutions was less costly, simplified, and can be more directly related to the long-term success of the institution.

With the introduction of the strategic planning concepts a new approach to information was seen to be necessary. The *technically oriented* information requirements of the 1970s and early 1980s were supplemented by strategically oriented systems.

Most information systems, whether computerised or not, were designed for operating and control purposes and provide internal historical information. Strategic planning however requires information frequently in the form of intelligence about future, external conditions.

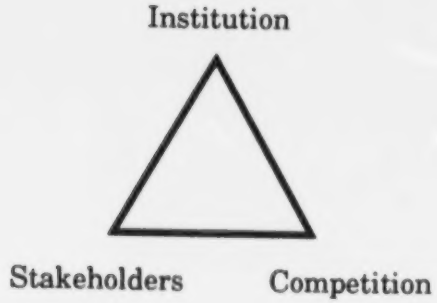
Again I have proposed the strategic triangle concept for systematic information gathering for the purposes of making two types of sequenced decisions: first for strategic choices and then for shaping, resource allocations and control. Key success factors (KSFs) help break down further the information required at each vertex of the triangle.

The strategic triangle for information

The triangle concept is deceptively simple. Reduced to its essentials, it can be demonstrated that effective strategy deals with the interplay of institution, competitors, and stakeholders.

Stakeholders are students, agencies of government, foundations, communities, and so on. Any entity having a particular interest in the *products* of the institution becomes a stakeholder.

Illustration IX: Strategic triangle



Stakeholder information must include (or so it seems) trends analyses on application rates, admitted students, indices of student quality, retention to graduation ratios, changing characteristics over time, and so on. Additional stakeholder information, depending on the institution, would include new initiatives in government-sponsored research, changing initiatives of foundations, the attitudes of employers and so on.

Competitor information includes data from competing organisations on matters such as faculty salaries and benefits, levels of student financial aid offered, new program ventures, accreditations reviews, tuition levels, and so on. It is clear that the least developed and potentially most valuable set of information but not developed at most organisations concerns competition.

Institutional information must include indices of program quality, market viability, faculty turnover, costs, and so on.

Key success factors and key success indicators

Key success factors (KSF) are those few key choices around which favourable results are necessary to:

- secure the local market;
- move to the upper third in fee levels;
- retain a lively curriculum.

Information systems should develop key success indicators (KSIs) to assess progress on a KSF. For example the educational institution or private provider intending to move its fees *up-scale* needs to track annually the tuition charges of the competition. KSIs are necessary to assess direction-of-travel progress relative to the external environment.

In addition some KSIs at each point of the triangle are universally important (student numbers and quality, for example). However, the other KSIs will differ depending on the strategic choices already made.

In adopting the triangle concept of KSF-KSI information, it is implied that a successful strategy must be defined as an endeavour by the institution to differentiate itself in the larger market-place positively from its competition, on those three dimensions. A strategic move changes the institution, its stakeholders, *and* its competition. Anything less than this is not strategic, only tactical.

Quick starts

Reminder: *quick starts* are things that can be started within hours, or at least within the week. After each action principle, I shall list several quick starts.

1. Post facts everywhere. Share real-time data.

   In the lunchroom, at the Weyerhaeuser Corporate Headquarters, in Tacoma, Washington, employees find the company's changing Dow Jones value posted hourly. There is also a daily news note in everyone's mailbox containing current information (the price of sawdust) and a discussion of issues (old growth timber and the Spotted Owl). Organisations which realise the importance of immediate information place *daily* briefing statistics near staff mailboxes; others include a factual newsletter in every pay envelope.

   In summary therefore, place real-time information in all those places where employees congregate and in conjunction with important matters like the pay check. Keep the information factual. Employees know the difference between facts and lobbying.

   However, an observation: in almost every instance where I have seen factual information pitted against keen personal or emotional concerns, the personal and emotional wins.

2. A personal, coffee-and-danish listening ritual.

   One way to elicit real-time information is to listen to first-line personnel. For example, Tom Peters advises developing a personal listening ritual. He suggests managerial personnel take an hour on a regular basis, say every two weeks, and imagine that they have been called in as an external consultant to improve some systems problem. In the course of the *make-believe* consultancy, determine in great detail the nature of one or two of the critical tasks performed by the particular person Find out precisely what is done, what works well, what doesn't work well, and so on. According to Peters: *This little listening device repeated regularly, will unfailingly yield strategic insights.* Start this within the next month. Do the same thing with a customer. Find out about their immediate problems. Some may be with your enterprise. Part of *everyone's* job is to learn how customers think.

   Andrall Pearson, President of PepsiCo, during visits to branch operations, makes it a point to meet, as he puts it, *with some hard-charger two or three rungs below the branch chief.* Bill Roach, CEO of Tandy Corporation (Radio Shack and other enterprises) told me over

lunch, that he makes it a point to visit one or more of his Radio Shack outlets anytime, unannounced. For example, on the way from the airport when he has an extra 20 to 30 minutes he will simply ask his driver to pull over when he sees a store. This keeps him in touch with daily operations - and keeps the store managers on their toes.

Doesn't this practice violate *chains of command?* Doesn't it cause rumblings? No, if it becomes a part of regular practice No, if no heads roll as a result of the conversations or the unannounced visits.

A personal account

At this point I cannot resist telling how, as a young man in Europe in the 1960s with a new Volkswagon with an engine that did not seem to run as well as I expected, I returned to the factory in Wolfsburg to complain. The factory is behind higher fences than most of the old *iron curtain* of Eastern Europe.

At the imposing front gate, in sandals and shorts, I entered the guard house explaining, in broken German, that I wanted to see Ruddy Malatz who, I learned at the local camp ground, could help diagnose the problem. I believed he was a mechanic.

In equally broken English, the security guard asked who I was and what was my problem. *I was an American and my new motor was not performing well enough.* Over the phone, the guard explained: *Mr Cope had come from America because I had a problem with my engine.* He gestured for me to take a seat.

Soon a car with a secretary came and we drove about a mile to the only tall glass office building in sight, where I was escorted to the top floor, taken down a long, imposing corridor to a spacious outer office with 5 meter high walls and immediately escorted into Mr Malatz's inner office. Since this did not seem to resemble the repair shop, I was rather taken aback.

Mr Malatz showed not a hint of surprise at my shabby attire. When I explained the problem, he immediately took me in his car, a white VW beetle, to retrieve mine at the gate. I followed him to a repair shop where he introduced me to a mechanic. The car was left and, as he drove me back to the campground, I asked him who he was. *Just the Vice President for Public Relations*, he replied.

I apologised, for taking so much of his time. He answered: *The customer is King. I am only at your service.* The car was returned two days later to my tent with an apology and a new engine.

That's customer service. And *that is* keeping in touch with real-live information.

3. Rapid sharing of test results.

When a new product or new production process is under development frequently the results are concealed and not shared until the process or product has proven itself. It is desirable however, every bit of precious detail should be shared as soon as it is known. Even preliminary data from pre-tests should be shared as they accumulate.

As I write this, I am looking at a forest products company newsletter on maintenance. One of the charts illustrates gyrations in work orders per month over the most recent 18 months at one of the divisions. Another is an illustration of the lumber cost in the same division. In both instances, the name and phone number of someone to call regarding the data was provided. Other parts of the newsletter provide technical data on bearing design and fatigue, 12 variables influencing the speed of startups, and the effect of idling truck engines. In every instance a contact telephone number is given.

4. At the next staff meeting instead of an agenda containing what is important to *top management*, the on-line staff are encouraged to share the living *numbers* on their operations. For example, I observed at various meetings I attended, an order clerk noted an unexpected increase in requests for a type of shortwave radio, a college admissions clerk noted an increase in the number of requests for an academic program thought nearly dead, and a wood productions technician found an increasing biomass loss due to wood boring insects. Ordinarily, what they noted would get summarised in quarterly or annual reports, and then, if noticed, months too late for the fast moving organisation.

I repeat, share real-time, living data from line personnel at every opportunity. People are built this way too.

> *For the most part, businesses grow or die, and growth depends on people.*
>
> Peter Ueberroth, former baseball commissioner and businessman

First steps

1. To keep pace CEOs and all managers need to learn how to blitz through written material.

Managers may devote a quarter to a third of the workday reading, yet many still head home with stuffed briefcases. The problem can only get worse as the information age presents even more paperwork for reading. Yet, the average adult still reads at about the same rates of a century ago.

I have taken several speed reading classes. They work. You will find your mind wandering even as you read this as the mind can absorb faster than your present reading speed. Like the under-utilised capacity of a computer, your mind races beyond the capability of the eye to

capture images. The problem is frequently that we still *pronounce* what we read in our heads slowing our absorbing rate to the speed of speech, perhaps at 100 or so words per minute. Our minds, however, can easily work at absorbing 400 or more words per minute. Most colleges offer some form of speed reading.

2. Begin building a newer vocabulary into all communications.

   Key works and phrases include: speed to market, quick response, fast cycles, parallel processes, time-based choices, and so on. Use of such a language will add to an organisational climate characterised as a ravenous hunt for the latest information, ideas and skills.

Concluding point

By engaging in these real-time activities the whole enterprise becomes engaged in collecting real-world, real-time, living data, as fast as possible. Staff will not be wasting time preparing memos that speculate on what might or should happen. As we know, these memos are frequently (I have done it also) posturing and politicising in the form of proposal or report writing.

Almost as a side benefit, perhaps the main gain of real-time information, is discovery. Logic, for example, in the form of trend analysis, is useful for proof, but almost completely useless for making discoveries.

Finally, aside from the intellectual development that occurs when individuals deal regularly with real-time information, when employees don't seem to give a damn about the company, the simple provision of information increases responsibility, having information is ownership.

As Jan Carlzon observes:

> *An individual without information cannot take responsibility; an individual who is given information cannot help but take responsibility.*
>
> Jan Carlzo, author
> *Riv Pyramidernal*

Action principle 2: Alternative strategies are to be considered at the same time

> *The test of first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time*
>
> F. Scott Fitzgerald

Kathleen Eisenhardt, in her very careful study of decision-making at eight computer organisations finds faster decision-making associated with the consideration of multiple alternatives simultaneously. She found that rapid decision teams consider multiple options thereby allowing easier and thus rapid response to changing conditions or unexpected events. On the other hand, she reported, slower decision-makers and slower decision-making teams tended to

consider one or two options at a time, moving to the next alternative only after finding the *first place* option was not feasible.

Merck, the drug organisation, has shown remarkable profitability in a process whereby multiple drugs are under development at the same time. Two or three similar drugs for the same human ailment are developed at the same time. Project leaders frequently share results. Only one product however will eventually be marketed.

Multiple strategic options are common. For example, growth-oriented organisations are frequently assessing expansions through alliances, bank loans, going public, additional venture capital, and stock offers. Frequently some combination of options will be chosen. Frequently different product options will be under consideration: low cost, high performance, select market niche and mid-market, and so on and through different channels - franchise, department stores, catalogues and so on.

Surprisingly, or perhaps not so surprisingly, it is better to have multiple options under simultaneous consideration. As in purchasing a home or car, it is at least difficult if not impossible to decide until several options are considered. The process of comparison helps to ascertain, to determine alternative strengths and weaknesses. Thus, when the most viable option (car or house) is seen, it is seen more clearly.

The same is true for a business option, except, for business options, alternatives can be combined; some venture capital, a bank loan, and an alliance.

Furthermore, by a forced look at alternatives, a premature escalation of commitment to a particular option is forestalled.

The decision-makers pursuing multiple options are allowed a lower stake in one option and thus can shift positions as new information becomes available. As Eisenhardt says: *Thus, decision-makers who pursue multiple options are less likely to become psychologically trapped and can quickly act on negative information.*

Another advantage to this process of simultaneous consideration of options is that fall-back alternatives are identified during the process. If the leading alternative is lost, the decision-makers can quickly shift to another alternative. Beside this ready shift to a second or third option during the process of deciding, if a decision is made and it fails, alternatives have already been examined. For example, when the United Airlines employee buyout proved unsuccessful, United rethought and moved aggressively placing a 21 billion order for Boeing aircraft.

Slower decision-makers, alone or in teams, will spend a great deal of time on each alternative sequentially (one product option, one source of funds). There is no ready fall-back option; there is no mental conditioning resulting from comparing alternatives.

So far, this presentation has examined what might be called the cognitive factors of decision-making. What about the political? What about power relationships? The resistance of influential people is frequently the cause of substantial delays.

In order to overcome autocratic power, it is necessary to make use of a multiple-tier advising process to multiply alternatives. Multi-tier advising using experienced advisers, is discussed in the next two sections. This is one of the elements necessary to build fast, smoother-working teams.

Quick start

Begin a conscious process to inaugurate a simultaneous consideration of options. Require, for example, that all presentations include at least two alternative options. In such an instance the presenting person (or better team) needs to present three options without specifying the choice at first.

The team is management.

John Danielson
Coors

THE TEAM

Action principle 3:	**Develop closely integrated, frequently interacting teams that must involve themselves with strategy, tactics, implementation and evaluation.**

There is probably more evidence being developed around the wisdom of this guideline today than amongst almost any other proposition of good management.

This idea was expressed among the principles in that multi-million copy best seller of the early 1980s, *Excellence: get productivity through people*. According to Tom Peters: *People get productive when they have a stake, are empowered, constantly trained, informed and urged to see the job as a matter of perpetual improvement*. When Wayne Gaughran became the director of a high technology project to build an ultra state-of-the-art cardboard making machine at the Weyerhaeuser Company, one of his first moves was to authorise his personal secretary to make six-figure purchases on behalf of the team's project. He made certain she and everyone else felt empowered. They all had a stake; they were all fully informed. Perpetual improvement was the passion. And they had a deadline.

The smooth-working team idea was also part of the advice offered in *Excellence* and involved such strategies as hands-on management, simplified form processing as well as a leaner staff structure, all of which were designed to move closer to the customer - the market-place.

Teams can be built over wide areas and across functions. One frequently overlooked dimension of team development is the inclusion of suppliers, sub-contractors, and customers, as illustrated in the development of Ford's highly successful Taurus. As Lou Veraldi, the Taurus project director said, *With*

Taurus . . . we brought all the disciplines (engineering, design, and so on) together, and did the whole process simultaneously as well as sequentially. Even before the professionals in the automobile industry were brought together, the project team had consultations with environmentalists, insurance company experts, urban planners and government officials.

The team idea has been stretched even further by General Motors for the construction of their new small car, the Saturn. Not only are teams constructing the car, they work for a salary and without time clocks. They earn bonuses based on production and quality control standards. The concept of team also connects the Spring Hill manufacturing plan with dealers throughout the country. Each week a dealership is expected to discuss how the Saturn is selling and what customers are saying. Further two *partners* are actually working in the plant: Jack Fox, with dealerships in California and Washington has partners with the Engineering Die Cast Team and the Body Line Assembly Team.

Although educational institutions through curricular necessity bring staff together as teams, teams constitute more than people working smoothly together. The arrangement of the teams and the processes they go through will influence both the speed and soundness of their decisions.

First about process

In her research on faster decision-making at eight microcomputer organisations, Kathleen Eisenhardt discovered faster decision-making teams integrate strategic decisions with one another and with tactical plans for their implementation. These teams often decide on fall-back positions based on worst case scenarios at the time choices are made. In contrast, she found, slow decision processes will first involve the strategic choice (where) and then move to alternative means (how) of implementation. The two events are seen as discrete and disconnected.

She tells of a high technology organisation with a new CEO and a smooth working executive team that decided on the specifications for a new product, scheduled the timing of three new product releases, and re-budgeted the entire organisation for the coming year, all accomplished in six weeks. What appears to make so many bet-the-company decisions acceptable was the complete integration of each decision with all other major decisions and with tactical plans. Also important, because it built confidence, was a plan to manage a worst case outcome. One vice president termed this practice, *knowing your way out of each decision.*

Decision-making teams not only function smoothly when they integrate decisions, but perhaps more important, from a standpoint of getting good decisions, is improved thinking. Teams, as the psychologist, Gordon Alport observed, in decision-making *sink a shaft into the inter-subjective regions of the personality.* As the psychologists Amos Tversky of Stanford University and Daniel Kahneman of the University of British Columbia have demonstrated, human nature is essentially flawed in its ability to make sound judgments in the face of uncertainty. Cognition is emotionally coloured. Participation in team decisions mediates between emotional response (largely based upon *status*

quo) and more rational, fully-cognitive awareness. The result is more of an escape from subjectively-based and frequently quite wrong interpretations of individuals.

> *People regularly predict wrongly.*
>
> George Keller, author,
> *The management revolution in higher education*

A beer company

At Coors (a major beer company) in Golden Colorado, however, even with less professionally trained people, the self-managing team is working. It is taking two years to get the system in place. Everyone has to rotate through every position and eventually everyone will be able to do everything. The team is responsible for getting the job done. I recall being at the home of John Danielson, a glass plant manager at Coors, when an employee called to ask if it was all right to go home early. John emphasised the point to check with the team to get the OK. John confirmed that it usually takes about two years to get to this level of both responsibility and proficiency.

John has noted that *Winning teams are learning teams.*

Teams when forced to integrate decisions get improved decisions and get them faster. Developing concrete ties between decisions contributes to clarity because each choice is tested against a framework of choices. Clarity alleviates the anxiety that plagues executives especially when they face high-stake choices. On the other hand, without a drive to integrate decisions quickly, the what-to-do decision can be kept at an abstract level where the anxiety of the mysterious unknown resides.

It needs to be emphasised that fast decision teams do not integrate decisions using complex systems, or large expensive data banks, or even consultants. These teams operate within visions of where the organisation is going and maintain mental maps of how decisions relate to one another. This process is supplemented by brief planning documents, perhaps a budget and some engineering schedules. Any written document over three pages is wasting valuable time.

> *If one would underestimate the value of teamwork, let him be a competitor.*
>
> Hunter Simpson, CEO
> Physio-Control

> *The single most important reason for delays in development activities is the absence of multi-function representation on development projects from the start.*
>
> Tom Peters, author,
> *Chaos*

I have observed that groups that have worked together will make faster decisions. For example, at strategic decision retreats when all groups are asked to make a particular decision it is clear that those teams with experience

are able to get to the decision point earlier; all the groups will make the same decision (the evidence is obvious) yet some groups will come to the *solution* in as few as five or six minutes while other teams will take up to a half hour.

First steps

- Create a special room for team problem-solving meetings. Paper, whiteboards and electronic support are about all that are needed.

- Start a company practice that each time a task force is formed, although specific members are appointed, everyone can attend meetings, get on the list for E-mail, and so on.

- All teams are to have linking pin members.

Every team making rapid strategic decisions had at least one experienced counsellor.

Kathleen Eisenhardt
Stanford University

LEADERSHIP

It has long been a cornerstone of management philosophy that even if all other factors are favourable, poor leadership will mean failure. That there exists a relationship between clarity of purpose and vigorous leadership, on one hand, and an organisation's continued vitality and current excellence of achievement, on the other, cannot be doubted. Leaders leave remarkable imprints: Watson of IBM, Sloan of General Motors, Land of Polaroid, Iacocca of Chrysler, Kroc of McDonalds, Bob Townsend of Avis and the Kenneth Daytons, Henry Fords, Paul Gettys, Murdochs and Hearsts.

Leaders have variously been called visionaries, pumps, creators, welders of power, persuaders, consensus-seekers, but not mediators, office holders, caretakers and bottlenecks.

Leadership is hard to define

Robert Terry who directs a leadership program at the Humphry Institute of Public Affairs tells of how a member of one of the University's departments came to him for a quick list of leadership skills. He replied that it wasn't as simple as that. While leadership is a critical endeavour, Robert Terry knew there were at least 100 definitions based on such factors as human physical traits, powers of influence, behavioural theories, and various situation/contingency theories.

This not the place to debate definitions of leadership. Two notable books include Barbara Kellerman's *Leadership: multidisciplinary perspective* or MacGregor Burns's Pulitzer Prize winning volume *Leadership*. For the serious student of leadership, either are recommended for an overview of this complex form of behaviour. For our purposes, leaders need the ability to set goals and help people reach them. Leaders boost confidence and create harmony. They reward high performance and remove or punish weak performers. Leaders remove barriers to achievement, coach, spot opportunities, and so on.

For the purpose of defining leadership in the context of speedy decision-making, leadership has two critical ingredients: vision and the ability to make things happen.

Thus, the leader for the fast-moving organisation provides direction (has vision) and is someone who makes things happen that would not happen otherwise. Leaders have a vision of a better future and make things happen that are consistent with that vision. They frequently are architects of strategy. Vision and decisiveness are the key words.

Vision

Vision provides a view of the path ahead and conceptual glue to hold decisions together. In a study of 90 world leaders, across many fields, the one quality they had in common was a vision. Warren Bennis and Burt Nanus put it simply: *They are all able to induce clarity regarding their organisation's basic purpose, why it exists, its general direction and its value system. They are all able to induce clarity regarding their organisation's vision.*

Much has been said about visionary leadership. More important, however, for the purposes of this book is addressing the problem of decisiveness. Leaders need the courage for decisive action because people generally are not decisive. George Keller and Ann McCreery say it well: *The decision stage is the Achilles' heel, the black hole of planning.* To quote Keller and McCreery again: *Of the seven stages of strategic planning . . . the moment of selection and commitment is the most difficult, unyielding and nervewracking.*

From a standpoint of faster decision-making, the CEO must be decisive in the face of complexity and must decide when the team cannot decide. Indecision is common. Business leaders frequently are no better than congressmen and women and senators, and governors in making the hard choices. Individuals who desire to lose weight, quit smoking, marry, choose among job offers or even household appliances frequently have difficulty making a commitment.

The reality of strategic choices in organisations is one of great complexity. The teams described in the previous chapter cannot possibly know all the options before a choice, cannot predict all the consequences of their decisions, and do not have the time to examine all the information and all the possibilities.

In an interview with the former president of one of the nation's largest and leading universities, I asked what he did when deans or vice presidents could not reach agreement among themselves? Charles Odegaard's certain answer was: *I request that they meet to resolve the issues and make a recommendation to me; if they cannot agree, they know I will make a decision that may not satisfy any of the parties.*

His ultimate decision is not, however, made in a vacuum. He has a vision of a more perfect university.

That vision provides meaning, values, hopes and dreams cast into the future.

Diligence, sincerity, even sophisticated analyses of an industry cannot overcome the absence of a shared perception of what the organisation is about and why it should matter to everyone. The leader needs to be certain a shared conviction exists and that the organisation is capable of realising its potential.

Action principle 4: A vision needs communication

I find it instructive to think about what others have said about vision. Take for example a Sherson/Lehman Bros. investment advertisement: *Vision is having an accurate sense of possible. It is seeing what others don't see.* Quite simply it might be said that, *A vision is simply a creative insight.*

Warren Bennis and Burt Nanus, after a study of 90 significant leaders had this to say about vision:

> *This image, which we call 'vision', may be as vague as a dream or as precise as a goal or mission statement. The critical point is that a vision articulates a view of a realistic, credible, attractive future for the organisation, a condition that is better in some important ways than what now exists . . . Note also that a vision always refers to a* ***future*** *state, a condition that does not presently exist and never existed before. With a vision, the leader provides the all-important bridge from the present to the future of the organisation.*
>
> Warren Bennis and Burt Nanus
> *Leaders: the strategies for taking charge*

> *You can reach more of the world by U.P.S. than you can by the telephone.*
>
> UPS advertisement in
> *Business week*

Susan Walter and Pat Choate in their book, *Thinking strategically: a primer for public leaders* had this to say about strategic vision:

> *Strategic vision is an explicit, shared understanding of the nature and purpose of the organisation. It specifies what the organisation is and should be (rather than what it does). As such, it serves as the organisation's blueprint for success. Strategic vision motivates and guides the organisation in minimising the impact of threats and maximising the benefits of opportunities posed by the external environment. Strategic vision stabilises the organisation in times of turbulence and uncertainty . . . an eloquent statement of national strategic vision was set forth in the Declaration of Independence.*

And another:

> *If the vision of the organisation is shared by all and is equally clear to participants and stakeholders, if the information has been efficiently disseminated, and if analysis of the environments has been thorough and innovative, the mission, goals, and objectives*

will be the result of a natural progression of ideas and entrepreneurial thought.

Julie Jacob

Vision, as the word's derivation indicates, means to see an idea out beyond itself such that it gains autonomy. Thus its fulfilment always should be ahead and, indeed, independent, having a life of its own. Vision:

- should convey a sense of the contribution which the enterprise is to make to society;
- may state the goals (as key success factors) which the enterprise has;
- may define the collective character, or the image the enterprise wishes to present; and
- may, in stating what the enterprise is about, have the effect of eliminating alternatives.

Ideally the vision statement should provide a sufficiently broad umbrella and stimulating view of the path ahead, and thus, it will cover those things which the enterprise wishes to be involved in and to give a driving sense of where the path leads. Good visions, like poems, are open to interpretation; good visions enrich decisions and add meaning to human action; yet good visions also allow illogicalities, mysteries, happenstance, accidents, even fate.

During the 1980s, organisations created vision statements and circulated them to focus attention on what seemed important.

The very essence of leadership is that you have to have a vision.

Father Theodore Hesburgh, former president
Notre Dame University

A vision or goal need not be for the entire organisation. For example Digital Equipment Company's (DEC) support services for scientific environments specifies they are to provide scientists . . . *with an open, networked environment in which all users can easily work together . . . sharing information and insight in dynamic task-oriented teams, while choosing their own style of work . . . to offer a very straightforward, 'seamless' application interface between scientific and administrative functions.*

Footnote: This footnote is for those needing a definition of such words as *vision*, *mission*, *goals* and *objectives*:

Vision is understood to provide a sufficiently broad umbrella and stimulating view of the path ahead, thus, it will cover those things which the enterprise wishes to be involved in and to give a driving sense of where the path leads.
Mission tells what business is being accomplished, We are in the business of accomplishing. . .:
Goals specify how this mission will be carried, out, We operate A,B,C,... to accomplish X,Y,Z,...;
Objectives are measurements of accomplishments to determine degrees of success.

It needs to be pointed out that a vision does not come as a Eureka! From an intensive study of 12 individuals of creative genius, Wallace and Gruber (1989) concluded creative insight (that is, vision) comes as a series of small insights. It also appears that the individuals most likely to have such creative insights have a sense of aesthetics, have imaginative, logical and enthusiastic minds.

> *In the nature of things, greatness and unity go together; excellence implies a center.*
>
> John Henry Newman

> *In a time of turbulence and uncertainty, we must be able to take instant action on the front line. But to support such action-taking at the front, everyone must have a clear understanding about what the organisation is trying to achieve.*
>
> Tom Peters
> *Thriving on chaos*

Quick start

Have a contest to identify a new banner consistent with a view of the future. Ford has used, *Quality is job one.* GM responded (too late) with, *Putting quality on the road.* DuPont uses, *Better things for better living.* West Point claims, *Building men of character for the national defense.* Caldwell Banker, *Expect the best* and Siemans *Precision thinking.*

> *Simple is elegant.*
>
> Mary Beth O'Neill
> Sheraton Hotels

> *Wisdom is the ability to see the long-run consequences of current actions, the willingness to sacrifice short-run gains for longer-term benefits, and the ability to control what is controllable and not to fret over what is not. Therefore the essence of wisdom is concern with the future.*
>
> R.L. Ackoff

Action principle 5:	**Use advisers. Have a personal consultant. Encourage contrary views.**

This is a short section. Advice on having an adviser is preliminary to a more important action principle: be decisive. Being decisive when the options are many, data uncertain, and competitor moves unpredictable is dramatically enhanced by the ear and support of an adviser.

Listen to the adviser. Better still, make certain the nay sayers are also heard. Walter Scott, formerly CEO of IDS Financial Corporation, had this to say about the importance of the personal adviser: *All of us have had our share of bonehead ideas. Having someone tell you it's a bonehead idea before you do something about it is really a great blessing.*

Politics

One of the not so subtle reasons for involving individuals called either advisers or counsellors is that the political landscape may be seen ahead of time and rocks in the political path may be removed or smoothed in advance. What is obvious to all of us is that *political factors* will frequently delay decisions. Here I recall the newly appointed dean of a leading business school in a public university who had received the president's approval to order $250,000 of computer equipment. The order was subsequently placed. When nothing was heard from the vendor for weeks, he inquired about the order. He found it had not been processed by the purchasing office. When he questioned the vice president for business, the business vice president - an *old boy* in southern state politics - replied that he hadn't been consulted yet.

Through both my observation and through an examination of others' research, the centralisation of power in one or a few executives is not generally the answer to getting faster decisions. Even the all-powerful executive will stall, be indecisive and procrastinate. Some executive-autocrats are fast others are slow.

Advisers/Counsellors/Confidants

Individuals and teams making faster decisions will avail themselves of counsellors, advisers and confidants. This achieves two ends: firstly the confidence to make a decision is increased if a trusted adviser says: *Yes, that seems to be a good thing to do.* Secondly, the adviser will frequently identify the politically right way to proceed, and might even intervene if necessary to achieve action.

Who are the advisers? Older, experienced executives in the same organisation are frequently advisers. Wives and husbands, who have no direct stake in the organisation are useful for confidence building. Sometimes the adviser is the organisation's accountant, or an attorney or a consultant. Sometimes the adviser is a previous colleague.

What is important is that the adviser be experienced, trusted and a person of ideas. The experienced individual who no longer has a career axe to grind may play a critical role in providing objective advice. An associate within the organisation or outside with whom one has a long working relationship can be a confidant. A consultant with extensive industry-wide contacts and previous experience can be a source of ideas and contacts - at very least, a sounding board.

Why these individuals hasten decisions is multi-faceted. One reason is that the adviser provides a quick sounding board for ideas. Within minutes a confirmation is received or alternatives considered. Nuances on the original idea are entertained quickly. Having the alternatives out quickly sharpens insight.

Another reason is that the experienced adviser can help resolve the anxiety often associated with the unknown outcomes of a choice, particularly if it is a

strategic, high-stake choice. The experienced adviser can place the new idea in the context of past experience. Confidence is increased.

When the adviser is a long-term associate trust exists and, an open and frank discussion is likely.

While most of the suggestions concerning choice of an adviser emphasise age, experience, trust, and like, other adviser models are useful. The exact form of advice is less important than the fact that an adviser exists. For example, at Seattle's Microsoft, Bill Gates has a personal panel of about seven people known as the *architects*. These are the organisation's high priests of technology. They advise on high-risk choices in software strategies, the likelihood of competitors getting ahead in certain technologies important to Microsoft, explore potential new products, and so on.

Quick starts

1. Identify at least one adviser.

   National leaders (such as President Bush who occasionally retreats to Kennebunkport to confer with his advisers) will set time aside to confer on the longer-term issues. Decide now on a retreat with advisers. Keep the agenda flexible and loose.

2. Start a policy supporting devil's advocates.

   During the next discussion of a major company issue, appoint someone as devil's advocate. *I'm making it Tom's job to argue against this.* This is one way to make certain the negative side is heard, without making *Tom* unpopular for advancing the less popular view. You might even require the chief advocate of a plan to argue the case against it. And the chief opponent should build the argument for the idea. What the diplomatic community calls a free and frank exchange of ideas usually leads to a better solution.

> *The Greeks pointed out that for a kite to work you need a string - nothing happens without both.*
>
> Peter Ueberroth
> former baseball commissioner and businessman

First step

Develop a policy that makes it mandatory for positive and negative teams to argue the merits of all major moves, such as getting in or out of a business or a major capital expenditure. For example, at Anheuser-Busch the policy committee frequently creates teams to argue the case for both sides of a question. Sometimes there are three teams. Pat Stokes who heads the beer division is a strong advocate of the system. He says: *We end up with decisions and alternatives we hadn't thought of previously. You become a lot more anticipatory, better able to see what might happen, because you have thought through the process.*

Action principle 6: CEOs must be decisive about resolving conflicts

This whole chapter has been about accelerating the decision-making process. The last section was about smoother working teams. Getting team collaboration may slow down decision-making, getting on with the job, and so on.

Kathleen Eisenhardt, of Stanford University whose work has been an important influence on my thinking, found that faster decision-making teams take all points-of-view into account; conflicting alternatives are frequently present. She also finds faster decision-making teams develop their own capacity to resolve conflict through consensus, but where resolution is not possible, the CEO has to decide. Teams whose decision-making processes were slower were often paralysed when consensus was not easily reached.

The reason resolution is impossible in many cases is the inherent orientation of people, even the CEO, not to weigh options objectively. Team members will use the *status quo* as a reference level for all choices. Since gains are vague and possible losses from what the organisation or person is currently doing become more evident, the possibility of loss appears more concrete than gains. As the psychologists Kahneman and Tversky point out: *This, what they call 'loss aversion' favours stability over change.*

While much discussion has taken place about teamwork, and teamwork at least implies consensus, the reality is that individuals can have honest differences which serve to delay choices. CEOs must always be decisive and instinctive, focussing upon the decision to be made. When the team cannot decide, the executive must.

Aside from accelerating the decision process in order to maintain a competitive stance in fast-paced environments, another benefit flows from faster decisions. The decision-making process improves the learning process: executives learn by making decisions.

Eisenhardt quoted two vice presidents in ailing microcomputer organisations. One vice president said: *We tried to use consensus, but it gave everybody veto power and we ended up doing a random walk. Our products were too late . . .* Another said: *The big players (customers and distributors) were already captured by the competition. We were late.*

It is hard to argue against what is obviously a winning case, but the tendency to make the faster decision may lead, as it has with Microsoft, to premature entry into a market with a product that is not quite technologically ready. Although several products have made slow starts because the initial product was not fully developed, later versions, frequently years later, finally became big sellers.

The problem, if it is a problem, is due in part to Bill Gates' action orientation. He believes it is better to make a decision and correct it later than to make no decision. Entering the market prematurely may offer an organisation more opportunity to learn and revise than one whose product is fully developed when marketed.

Quick starts

1. One executive used a particular coloured paper for urgent memos to indicate that this matter required faster action; agreement was desirable; but action was needed. He would provide the date when a decision was to be made. Anyone wanting to influence the decision had until that time to provide information or to get the relevant players together.

2. Play video games. That will develop a fast decision-making style.

First step

All requests to task teams are to include an unreasonably short response time.

Case example:

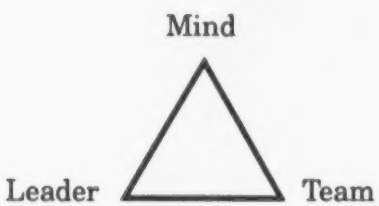
The senior management committee of Weyerhaeuser asked the new director of the Fiber Raw Material Business, appointed in October, to have a complete strategic plan ready for review on January 4. About three months. The company's resident strategic planners said: *Impossible! Not nearly enough time to get through the 28 step process that usually required 18 months.*

Summary

Whereas vision involves hopes, dreams, insight, and a future perspective, today's decisiveness is about commitment, passion, will and courage, all of which are built from confidence.

Confidence is at the center of the strategic organisational triangle of whose vertexes are, *mind, team* and *leader*. Every action principle from emphasising real-time data to executive decisiveness - is designed to enhance confidence.

Illustration X: Confidence triangle



Dreams put human beings in motion. If the dreams are good enough, they can overcome happenstance and paradox: and the end product will be more solid than the practical designs of men (or women) with no poetry in their souls.

Norman Cousins 1977

RECOMMENDATIONS: GETTING IT TOGETHER

This last tion is about getting it together. More rationale and more specific actions to ake are presented.

The actions recommended in the final section of this chapter increase the organisation's effectiveness in turbulent, fast-paced environments and contribute to the understanding and implementation of the previous guidelines. Many of these actions are small and seemingly insignificant. Cumulatively used however, they provide powerful competitive advantage.

All of the actions presented here are developed from the book's previous six principles. All contribute to building the intellectual capacity of the organisation, the development of smoother working management ams and the leadership capacity of the CEO.

This set of recommendations reinforces many of the points made throughout the previous pages, often with a slightly new angle. Sometimes with a new quick start.

These recommendations will also serve as a test of how well you and your organisation stand in relation to competition throughout the remainder of the 21st century.

- Make the organisation even flatter.

  Hierarchy leads to a loss of quick, open and accurate communication because people channel information up and down, wasting valuable time and losing the kind communication that takes place between equals.

- Ensure provision for flexibility and freedom to act. DECENTRALISE. DECENTRALISE. DECENTRALISE.

> Karl Weick, conducted a second-by-second analysis of the 1977 Tenerife air disaster. Most readers will recall the two 747 jumbo jets that collided on the ground at Tenerife Airport, in the Canary Islands, killing 583 people. The KLM crew was under pressure to take off because of a limit on the flight time allowed in one month. Consequently, the KLM jet began taxing down the fogged-in runway in the path of the landing Pan Am jet.
>
> Karl Weich concluded that the disaster might have been avoided had the pilot the simple discretion to extend flight duty hours. The pressure to get into the air and to conclude the flight would have relieved the pressure to take off going prematurely.

Quick start

A simple quick start is to lower in terms of the hierarchy and increase in terms of funds the sign-off limit for purchases. As related previously Wayne Gaughran, a manager with the Weyerhaeuser Company, in order to speed up purchases and thus action on a major research and development project in his absence, placed his six figure purchase authorisation in his secretary's hands.

> *Don't just stand there, do something.*
>
> Tom Peters

- Build around small, experienced, decision teams.

  Note this is also a move toward decentralisation; it develops autonomy.

- Make a commitment that all strategic decisions, those involving positioning, high stakes, and multiple functions, will be made in a time span of four months; three months would be better.

  Why three or four months? Evidence from research on the most profitable of organisations suggests that these faster acting organisations are usually able to take action in less than four months. My own observations confirm this. It is obvious that such organisations as Compaq, Federal Express, 3M, . . . are frequently entering new markets or innovating faster than their competition. I have even seen this occur among what might be regarded as a slow moving industry: colleges and universities.

- Provide for intensely rich, real-time information.

  Much has been said already about this on the first action principle. This is also a form of decentralisation. Each raw number is an autonomous unit.

- Provide for a dynamic planning process which might well follow many of the points made in the first chapter on strategy.

> *The eight principles of 'Excellence' can be boiled down to one: Decentralize.*
>
> Tom Peters 1990

- In written communications, make greater use of *we* and *directed* subjects.

First steps

We Subjects: To build the sense of team, or corporate identity, and shared values, in written communications, substitute *we* for *the Policy Committee* for example or *we* for *you* subject sentences as *we need to* rather than *you need to*. We-focused documents imply that everyone is a member of the same club.

Directed Memos: In the opening line of memos to promote action, move away from the value-free subject. Move towards *directed* subjects. For example, instead of *RE: production levels,* write *RE: need for higher production levels,* or *RE: product pricing,* write *RE: move toward more competitive pricing.* Ensure that assertive lines appear at the top of memoranda.

> *Increasingly, the computer industry will be driven by the challenger companies that are trying to build a new future, rather than the giants that are trying to protect their past.*
>
> Regis McKenna, author,
> *Who is afraid of big blue*

What does the private enterprise organisation which follows the principles look like? Could such an organisation be imagined.

WHIZ INCORPORATED, LTD.

WHIZ makes top-of-the-line test and measurement equipment for other technology organisations. The week begins with an intense Monday morning senior executive staff meeting focusing on what is happening this particular week with sales, engineering schedules and product releases. Current data is shared widely. In the early afternoon, these executives are briefed on progress with new products. In the late afternoon they frequently either conduct round table forums at which time lower level executives, engineers and scientists provide feedback, usually informally over coffee, or the executives visit labs and manufacturing operations to talk with technicians and line personnel. A measure-report-and-see-everything momentum is established on Monday. It is understood that nobody travels on Monday.

By end of the week the executive team is reviewing a wide range of quantitative indicators from the vice president for finance, including cash, receivables, inventory, bookings, backlogs, scrap rates, engineering milestones, absenteeism rates, quality assurance tests, and so on. The vice president of marketing issues a weekly, one page report on market, technology, and competitor activities. There is a sense that everything is measured.

The current CEO is described as one who listens, makes up his mind and implements his decision. He frequently has lunch with the previous, now retired CEO who was his business partner in earlier years. His pet sing-along phrase is: *Don't worry, be doing!*

Being comfortable with ambiguity himself, the CEO is always throwing up a multiple array of possibilities for future actions. He insists all task teams consider and present multiple options. He has been known to argue for an option he didn't support and to urge others to support someone else's alternative that they were actually opposed to. The purpose of these tactics is to air different options.

When task teams, after a reasonable time, are unable to resolve a particular matter the CEO or the relevant vice president or senior manager will listen and decide. One example was a new product discussion where there was significant disagreement. Some argued a new product was necessary to counter moves of a competitor; some argued that the new product would divert engineering resources from an even more innovative, leap-frogging product currently in design; others argued for a simple modification of a current market share leader.

After a quick series of meetings, during which there was a push for consensus, but none was reached, the CEO made the point that he had listened, that all the points were out and everyone had said enough. He then decided.

Taking into account WHIZ's niche of the technology market and because he had a vision of the organisation as the top quality, rock-hard, innovation leader, the CEO decided on the *leap frog* product. With that vision of the organisation's place in the niche, it became easier for him to decide and to sell the decision to the doubters. That vision provided the conceptual glue. He also let it be known that the backup course of action (should a key engineering breakthrough not occur) would be to modify their current market share leader. Thus, WHIZ executives already knew their way out of the decision if it should prove unworkable. Uncertainty was reduced. Anxiety was almost non-existent.

Of course, a tertiary education institution is vastly different from WHIZ. Is this style of organisation, however, something to emulate, even a little?

While this book has largely drawn its conclusions from observations and research chiefly based on high technology firms, the resulting guidelines and recommendations, are, I believe, applicable more broadly.

For example, GAP clothier of Seattle, a retail clothes outlet chain chosen in a *U.S. news and world report* national survey (1990) as the company that best exemplifies American style, has a niche strategy which caters to the fickle fashion trends among 12 to 17 year olds. Knowing that the fads and tastes in clothing change rapidly, sometimes as often as six times in a year, GAP invested in high technology telecommunications and flexible production equipment.

GAP is now capable of detecting an item of clothing developed by a competitor and which they believe has sales potential. The design is reproduced, marketed and put into large-scale production, and available for sale on store shelves, all within 30 days.

An even faster response system has been developed for the United States by the French garment maker Vestra. According to a story in *Business week* Vestra can delivery a custom made suit in under a week from the tailors in France. Tailors in the US take key measurements and feed them into a computer which summarises the new orders and beams them overnight to the

manufacturing operation in Strasbourg. Here this garment is sized and laser cut. A staff of tailors does the finishing work in a day and the suit is shipped. The whole process from order to delivered product will frequently take less than a week.

And faster still is Haggar Apparel of Dallas: it has the capacity to restock inventories of slacks for over 2000 customers not in a week but within a few days.

Summary

I have shown that faster decisions and consequently the vitality of organisations in faster paced environments, depend on a configuration of improved cognitive, team and leadership processes.

This research began when I was asked by one of the big six auditing/ consulting organisations to assess their proposed strategic planning model (designed for use by high technology organisations) against the research results in the literature.

I have faith in the conclusions and logic of the model presented in this book. Because ever changing conditions increase the complexity of analysis however, it is ever harder to determine what with certainty effects what.

Because the environment, which is now global, faster moving and competitive is the driving force, it is probable that all enterprises would benefit from determining how to structure themselves for faster decisions and faster operations. Time is economics. There is no alternative.

> *The task of a leader is to get people from where they are to where they have not been . . . to bridge the gap between what is and what is yet to be.*
>
> H.K., a Secretary of State.

CHAPTER THREE

TOTAL QUALITY IMPROVEMENTS

This page introduces an edited version of a conference address presented in 1989 by Professor Lawrence Sherr of the University of Kansas. Rather than writing something original for this publication, I have simply included Mr Sherrs' own statement on total quality management (TQM) which I prefer to refer to as total quality improvement (TQI).

Quality has always been a highly valued feature espoused for higher education by the higher educators. I don't believe, however, much of higher education is nearly as good as we claim it to be. And the 1990s are likely to become the decade in which our costs, productivity, and quality become matters of growing public concern.

The new emphasis on quality currently being developed in tertiary education will be different from that which we have previously known. Just how different? I don't know, but its outline is taking shape. I see a new push for greater quality at less cost. The total quality era will within a year or two supersede any set of management ideas now generally followed in education.

Some see the total quality concept as something from business and want no part of it. It is something from business, just as are strategic planning and faster decision-making. I know all the arguments used to reject an idea taken from business, and I agree with them. I have come to understand, and others who are leading thinkers in the business community have also realised, that many business practices havn't worked for the businesses either! If they had worked, many business and some national economies woudn't be in the shape they are in today.

A commitment to total quality is a commitment to higher education's values and not to the recent discovery of quality by business. *These values are more relevant to higher education than industry.*

What is total quality?

What is total quality? *Total quality is a philosophy of continuous, constant, impassioned improvement everywhere by everyone in an organisation all the time.* Mr. Sherr, so far, has made the most reasonable statement about the concept, thus, I provide it for the consideration of teaching staff and administrators.

IS THERE A BETTER WAY TO MANAGE HIGHER EDUCATION?

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Is there a better way to manage higher education? was the question put to me. In thinking about this I must admit that the thought crossed my mind more than once that what I should do, but I won't, is stand up here and say in a rather deep voice, *Is there a better way to manage higher education?*, stop for a pause and give a deliberate and scholarly *yes*, and then ask for questions. My hunch is that's not what you came for. I will try to keep my remarks interesting and brief, but it should not surprise you that my answer to that question is *yes* and I'm going to do my best to defend that position over the next few minutes.

There may be another question on your minds, a question that struck me in hearing some of the speakers this week, and that question is, *Is there a future for institutional research?* Perhaps more specifically, *Is there a future for institutional researchers?* My answer to that question is *yes*, and in fact you will find that the main purpose behind my talk is to carve out my position on what institutional research needs to be doing in the future to not only help our institutions survive, but thrive.

Let me look ahead to where I'm going so you will know when to listen carefully and when to take a snooze, as the case may be. I'm going to present some rather strange ideas. Strange may be a nice way of putting it. Other people call it novel; some believe that in what I'm about to say, I'm committing heresy. I'm going to present strange ideas about higher education and what it's capable of doing, and how it's not doing it. Specifically, I want to present some ideas about the role that I personally would like to see institutional research play in the future.

I'm going to begin in what might appear to be an awkward way. I'm going to begin with my conclusion. I want to see institutional researchers continue their own education and share their knowledge with both the managers and the staff of our colleges and universities. I see you folks in the future not only as presenters of numbers but also people who are consultants in solving problems. Today I will deal with what those problems are, and how to attack them.

In preparing for this talk, I looked over your agenda, the *Chronicle of higher education*, and some other academic publications. I want to share with you some words that I found: strategic planning - enrolment management - data administration - fund raising - management information systems - conflict management - labour market information - cost analyses - cost studies - relational data bases - managing change - environmental scanning - marketing - market research. As a professor, one who went into this business

because he loves to teach, I can't help but ask several questions: What does this have to do with my life? How does most of this affect me and help me in teaching, whether it be my undergraduate statistics course or working on my research or with my Ph.D. students. I'm struck by how little of this agenda is dealing with what I'm going to call *the improvement of operations*, or how to more effectively use the resources that we do have available to us today. Some of the agenda deals with that, but very little.

Perhaps the following is the most important observation. As a professor of business who is lucky enough to spend a portion of his life not only in the ivory tower, but out there in the business community, I can't help but wonder what would happen if I read that list to some of the people that I work with in business enrolment or admissions, and said to them, *Where do you think this list came from?* I think they would probably respond by saying that it came from a business forum, not an academic forum. I make that observation for the following reason. I want to make a claim. It is a thesis that you may agree with or you may not agree with, that the methods we use to manage our institutions are copied directly from America's large corporations. Some of you may be aware of that. I'm sure many leaders of higher education would deny that, but I can assure you that virtually every one of these terms has its roots in one of America's Fortune 500 companies, and that we are following methods we have rarely developed but rather imitated from another part of our society. I want to take a look at just how well those business institutions are doing because, to put it bluntly, I think whether consciously or unconsciously, we are imitating institutions that do not have the track record to deserve that imitation.

Let me begin by asking you some questions. How may of you own automobiles? Raise your hands, please. Feel free to raise two. How many of you own automobiles that are not made by an American manufacturer? Nationally, that is a third of the audience. In this room I suspect that it is a little bit more. How many of you bought a TV in the last six years? How many of you bought Zeniths? The rest of yours were made by non-American manufacturers. How many of you have a VCR? None of them are made here. How many of you chose to wear shoes today? If we checked the clothing on our backs we would discover 50 percent of the clothing was made overseas. How many of your offices have copy equipment? How many have the name *Xerox* on them? That was a monopoly fifteen years ago.

I would like you to imagine that today is not May 3, 1989, but May 3, 1969, and somebody came before you that is a lot smarter than I am, and that person made the following projections, because I certainly couldn't make them in 1969. Suppose that person said to you that in the next twenty years the following companies would be in trouble: General Motors, U.S. Steel, Xerox, and industries such as textiles, automobiles, steel, electronics. Somebody in America would discover this marvellous thing called *the chip* and that industry would now be in trouble. I think if somebody made that projection to you twenty years ago, and I know if I heard that projection twenty years ago, I would have thought that person was out of their mind. But we know the outcome. It has happened. Suppose as recently as ten years ago somebody came to you and said that such stalwart companies as IBM and Eastman Kodak would find it necessary to completely reorganise the way they do

business in the next decade because they discovered that what they were doing wasn't working. Again, it would be hard to believe.

I want to review some statistics with you because it is important that we recognise the record of these companies whose methods we are using and then say, *Perhaps we should be using somebody else's methods.*

Computer chips. In 1980 the United States had a 60 percent market share of chips produced and sold on the world market. By 1985 we were down to 8 percent. We became worried about it. Our Department of Defence doesn't like it. It became a national agenda. We are now up to a little over 10 percent.

Automobiles. In 1966, 7 percent imports. Today it is at 30 percent imports. General Motors in 1980 had a 54 percent market share in this country, and they were the low-cost producer of cars. Today their market share is at 36 percent and still dropping slowly and they are the high-cost producer of cars.

Construction equipment. In 1966 five of the world's largest construction companies were US companies. Today, it's one in five.

Steel. In 1980 there were 291,000 steel workers, today 121,000.

Well that's fine. After all, we all know we are no longer a manufacturing country. We are into services. Well, first of all, we are a manufacturing country. What has happened is that it has gone from the large corporations to smaller ones who can manage themselves better, providing fewer jobs.

Second, services pay a lot less. But our record in services is nothing to be proud of. This is rather surprising. In 1976, nine of the largest banks in the world were US banks. Today it is one out of ten. But perhaps even more surprising, to give you an idea of our record in services, only four out of the top fifty banks in the world are US banks and all four of those banks are in the red. Our record is not much better either way.

Why? If you ask American management, they blame it on American labour. If you ask American labour, they blame it on American management. That's like the old western movies. They went that-a-way. I want you to notice, though, that it is not unlike what we hear in higher education. How many administrators, presidents and others, complain about the faculty and staff? The lazy staff who only come in 8:00 to 5:00 and don't do any more, and the faculty, who are even worse, hardly doing any work, protected by those institutions of tenure or perhaps their labour union. On the other hand, those of you who have faculty friends, the things we have to say about administrators we don't share in public forums like this.

I want to begin here by citing some examples to show you how nonsensical these excuses are. Let me take two case histories.

Case history number 1: Motorola. They make television sets. They used to. In 1980-1981, they had a plant in the suburbs of Chicago. I want you to keep in mind these are suburbs of Chicago and not the suburbs of Tokyo. I want to tell you how that plant was operating in 1980 or 1981. I want to compare what

happened to it over the next two years. In the early 1980s that plant had over 1,000 blue collar employees. They had 600 indirect employees. Now you folks know who indirect employees are. Notice the ratio - 600 to 1,000.

They made 1,000 television sets per day, [and which] required 1.3 repairs per television. To put it another way, they did not know how to make a television set that worked. And I suspect some of you have some Motorolas from the late 1970s and early 1980s and could verify that. Their annual warranty costs were $16 million.

Mitshusta, far ahead of its time for a Japanese firm, saw the handwriting on the wall and purchased that plant in the early 1980s. I think the year was 1982. They purchased that plant and I want to show you what happened in the next two years with the same workforce and the same union.

Now, nothing is really the same. In two years people quit, there are some replacements, but the majority of people are the same people, and it's important to recognise that the same union was part of the agreement they made.

Two years later, 1,000 employees, the same as before. The original 600 indirect employees was now 300. That's like saying all you folks on my right, we don't need you anymore. The honest number, though, was 306. They brought over six Japanese managers. They made 2,000 television sets per day rather than 1,000 sets. Required repairs went from 1.3 per TV down to .06. That is six mistakes per 100. Today they are down to three mistakes per hundred, and the television sets being made in that plant are being exported to places like Japan. To give the final punch line, their annual warranty costs went down to $2 million. Note that the comparison from $16 million to $2 million is an unfair comparison because that is on a production that is twice as much as before.

They did this without automation. In fact, most of the highly automated plants in this world are in the United States. They did this with American workers. They did this without cultural homogeneity. I refuse to believe it is the American workers' fault. Now that should encourage us all. We will all go home and say *Let's get rid of our presidents and bring them over from Japan.*

FORD MOTOR COMPANY

Let me cite another example - Ford Motor Company. In 1980 while the US was bailing Chrysler out of its problems, Ford was not far away from asking for the same thing. In 1980 they lost $2.85 per share or $1.545 billion. By 1986, using methods that I am going to talk to you about, they reduced their operating costs $12 million per day. And, according to independent observers like consumer reports and perhaps more importantly, you and I, they are building a car that we perceive to be the best quality car made in the United States. Ford went from a loss of $1.545 billion in 1980 to a 1988 profit of $5.36 billion, something larger than General Motors on two thirds of their asset base. For those of you with a background in business they had a return on capital of 24 percent.

How did they do it? That is what I want to talk about. There are models for us to look at, models like Ford, Nashua, and several other companies, that I will talk about. But they are not the well known models who have had a record over the last twenty years that is less than something to be proud of. The important thing I want to point out with Ford is that they did it not only with American workers but with American managers.

The problem is not the people. The problem is the methods they used. It is the management system. Something had gone wrong in these organisations and I'm going to claim that the same think is going wrong in higher education. Somehow or other, these organisations in their actions, and I want to differentiate between the actions they take and the words they speak, some how or other, in their actions, they forgot three very simple but important principles:

- the most important part of any organisation is its customer;
- in order to attract new customers and hold old customers, you have to satisfy their needs;
- you can't satisfy their needs unless you know what their needs are.

I'm going to be presumptuous. I'm going to repeat it again because I think it all applies to us. You can't attract and hold customers unless you consider them the most important part of your organisation. You are going to do that by satisfying their needs, and you better know what their needs are.

What does that have to do with higher education? I will put it bluntly. I believe very few of our institutions have any idea of who our customers are. Now, I don't pretend to be an expert in all of higher education. I do think that I have a better understanding of the large state comprehensive research institution than of any other type of institution because that is where I have spent the last thirty years of my life. I will make the previous claim for most large state comprehensive institutions, but from what I read I believe it holds true for many other institutions. We are not sure who our customers are, no less than what their needs are.

And again I want to separate the rhetoric from the action. I don't hold any of you present today responsible for this because this agenda is really set by the people that you report to, who tell you in what you should be interested. The only reference to students, for instance, I can find in the AIR program is to undergraduate students and those references are few and far between. I know there are people here from junior colleges, and people here from four-year colleges where that reference to undergraduate students makes sense. However, I also know that there are people here who are not from those institutions but rather from graduate institutions where there are other kinds of students. What I find from my own experience in a comprehensive institution is how the talk abut the importance of undergraduate education differs from actual practices.

I believe that we behave no differently than many current business institutions. Somehow or other we have lost our way. We don't know who our customers

are. We clearly do not know what they want or how to satisfy them. How did this happen? We like to find excuses. We like to blame people and we in higher education, I claim, are just as guilty of doing that as any business leader I have met. It is interesting how we Americans like to find those excuses. As I pointed out a few minutes ago, you talk to management, they blame labour; you talk to labour, they blame management. You set them at the same table and you find out that they are often friends. So now they look elsewhere to place the blame. They talk about the differences in culture, they talk about the un-level playing field, about the value of the dollar. We keep looking for excuses rather than turning to ourselves.

When looking for answers, I suggest we look at Japan because they have been so successful in making an impact on those of us in the United States. Who does Japan credit for its success? This will surprise many if you haven't heard this story before.

Since 1952, the Japanese Union of Scientists, in conjunction with the Japanese government, have made a series of awards on an annual basis for those firms that have done the most to increase the quality of their product. Do you know what the name of that award is? I suspect a few of you do but I would be surprised if all of you do. That award is called the W. Edwards Deming Prize. I'm going to give a commercial at the end to read more about it. It is his work to which I am referring.

DEMING AND STATISTICAL QUALITY CONTROL

Who is Dr Deming? Dr Deming is a US college professor, teaching statistics, eighty-eight years old. He, and many of his colleagues developed methods in the 1930s, mostly at AT&T, some at the Bureau of the Census, that were applied and used during World War II. These are methods in statistical quality control. After World War II, these same people (although Deming gets a lot of credit, there are many others who deserve credit, like Juran) went to some of the companies I listed earlier and said, *Can we help you make better cars, better steel, better what have you?* and they were politely told *goodbye*. Somebody on General MacArthur's staff, and I have never found out his name but he deserves a lot of credit, recognised that this was just the answer that the Japanese needed to rebuild their economy. They invited these people over to Japan. If you read some of the literature of the Japanese industrialists, they would have liked to say goodbye to these people also, but they were not in a position to negotiate. They adopted the methods I want to talk to you about, and share with you today. It took them thirty years to succeed.

Why do so many of you own non-US cars? May I suggest an answer with which most of you will agree? The car is of higher quality. Is that right? The interesting thing today is that not only is it of higher quality, but does it cost you more or less to buy? It costs you more to buy a Japanese car today than a US car. They originally came over on a price basis that was lower, but today we Americans are willing to pay a premium price for that quality.

What you may not know is that not only is that quality higher in the sense of less defects, less breakdowns, less warranty costs, numbers that can be easily measured, but also what you may not know is the most significant fact, they

produce those cars, higher quality cars, at a lower cost to the company. You talk about being in a neat market. You are making a higher quality product at a lower cost to yourself for which the customers are willing to pay a premium.

I want to look at those methods. Let me give you a reference right away because I cannot do it justice in the next few minutes. The book is Deming's *Out of the crisis*, published by M.I.T., Center for Advanced Engineering Study, 1986. In that book, he argues that management has fourteen obligations that they need to meet to run their firm, and in the time available to me I would like to sketch out some of those obligations. I will try to use his words, where appropriate, and sometimes change those words so they better fit the education audience since he was often writing for manufacturing.

CONSTANCY OF PURPOSE

Point 1. Create constancy of purpose towards improvement of product and service with the aim to become competitive, stay in business and provide jobs. I want to emphasise two phrases: . . . *create constancy of purpose.* Decide what your business is and stay in it. We heard those complaints about US business. A nice example of this is a game that was most popular this Christmas, Nintendo, the computer game. Atari brought computer games to us over ten years ago. When Atari decided to get out of that industry, the Japanese firm, Nintendo, got in and they improved it and improved it until now it is the best selling Christmas game.

Constancy of purpose, I will argue, is needed in higher education, too. We seem to skip around. At my institution we have a program that we have been proud of for many years. When I first came to KU twenty plus years ago every undergraduate was required to take it. It is a one-year program in Western Civilisation. As we grew larger and larger, it became necessary, unfortunately, to reduce the requirement until today it is required only for people receiving BAs but that means that over 1,000 go through it every year. I don't want to pick on the University of Kansas but it just happens that I have more knowledge of it than other places, and I am proud of that institution or I would not be here, or there today, I assure you. But over the last ten years we have changed the way we teach that course three times. We recognise *it's broke* so we put in a brand new process. We give it two or three years, we recognise *it's broke*, and we put in a brand new process. What we need in higher education is constancy of purpose, not putting in new processes, but improving the processes we have.

What are these purposes? We need to satisfy what they are. I doubt that many of our institutions really know who our customers are. I honestly am not sure. I can give you quite a good debate, at my institution, as to whether or not my students are my customer or my raw material. You could argue they are both, but I have a hard time, honestly, and I do not want to dwell on this right now, saying that a nineteen-year-old is my customer. It may be that when he or she is thirty years old and they look back on their education, they are my customers, but it is a subject matter to which we do not give enough attention. I am not here giving answers today but raising questions.

We need to understand what are our purposes. How many of your institutions have mission statements? How many of you know your mission statements? And those of you who know your mission statements, how many of you think half of the employees of your institution know your mission statements? If we don't have a mission statement that is a living document, how are we going to make things work?

I want to share with you two stories along these lines to make my point. You recall a terrible incident involving Tylenol three or four years ago with the cyanide scare outside Chicago? I don't know if you are aware of who it was in that company that made the decision to pull Tylenol from the shelves not only in Chicago, not only in Illinois, not only in the Midwest, not only in the United States, but to pull Tylenol from the shelves from across the whole world. While the president and top executives of Johnson and Johnson were in a meeting frantically trying to figure out what to do, it was the US materials manager who made the decision. He could not work for that company for twenty years and not recognise Johnson and Johnson's true commitment. If you look at their record, they are proud of their true commitment to selling stuff that makes people well. That person realised they were not in the business of selling stuff that would kill somebody. And without any fear or apparent hesitation, this individual removed their best-selling product from shelves worldwide.

That is why I talk about the importance of a mission statement. If you have a mission statement that is clearly articulated, that people buy into, you can trust your employees to make intelligent decisions.

I want to share with you the mission statement for Ford Motor Company. You will be surprised how much of this you could buy into and would perhaps like to see your institution buy into. I'd like to see mine.

> *Ford Motor Company is a worldwide leader in automotive and automotive-related products and services as well as in newer industries such as aerospace, communications, and financial services. Our mission is to improve continually our products and services to meet our customer's needs, allowing us to prosper as a business and to provide a reasonable return for our stockholders, the owners of our business.*
>
> ***VALUES**. How we accomplish our mission is as important as the mission itself. Fundamental to success for the Company are these basic values: **People**. Our people are the source of our strength. They provide our corporate intelligence and determine our reputation and vitality. Involvement and team work are our core human values. **Products**. Our products are the end result of our efforts, and they should be the best in serving customers worldwide. As our products are viewed, so are we viewed. **Profits**. Profits are the ultimate measure of how efficiently we provide customers with the best products for their needs. Profits are required to survive and grow.*
>
> ***GUIDING PRINCIPLES**. **Quality comes first**. To achieve customer satisfaction, the quality of our products and services must*

be our number one priority. ***Customers are the focus of everything we do.*** *Our work must be done with our customers in mind, providing better products and services than our competition. Continuous* ***improvement is essential*** *to our success. We must strive for excellence in everything we do: in our products, in their safety and value; and in our services, our human relations, our competitiveness, and our profitability.* ***Employee involvement*** *is our way of life. We are a team. We must treat each other with trust and respect.* ***Dealers and suppliers are our partners.*** *The Company must maintain mutually beneficial relationships with dealers, suppliers, and our other business associates.* ***Integrity is never compromised.*** *The conduct of our Company worldwide must be pursued in a manner that is socially responsible and commands respect for its integrity and for its positive contributions to society. Our doors are open to men and women alike without discrimination and without regard to ethnic origin or personal beliefs.*

I would be proud to work for a university that made most of those statements, and I can tell you that Ford has training programs for every new employee so that everyone from the janitor to the new vice-president knows the mission of the company.

In early 1980s, NBC had a white paper on TV *If Japan can, why can't we?* That was a one-hour program about Deming's work. Donald Peterson, president of Ford, saw that program and the next morning he called Dr. Deming, and, as they say, the rest is history. Let me go on with some of the other points.

ADOPT A NEW PHILOSOPHY

Point 2: Adopt a new philosophy. We are in a new economic age. Western management must awaken to the challenge. Learn responsibilities and take on leadership for change.

Give an American consumer (I doubt that this is only true for Americans; my guess is that it is true for any well-to-do nation) a choice where they can buy something of high quality, and they will take it over something of a quality that is lower. They will no longer live with old fashioned ways, mistakes, defective materials, and poor workmanship. Given the choice, they will take quality. That's part of this new economic age.

The second part of this new economic age, which is almost anti-American, is the fact that quality does not necessarily cost more. Previously I mentioned that the high quality producers are producing at a lower cost to the firm. Why? Studies have shown in manufacturing, that between 10 percent and 40 percent of the cost of goods sold, that is the cost to the firm to actually make this material, is in scrap and rework. I have done a lot of consulting in service organisations and although I cannot back up my view with figures as I can in the manufacturing sector, it is my belief that the scrap and rework in service organisations, including universities and colleges, is even higher.

I don't like to make the analogy of scrap and rework to students flunking and dropping out, but it's true. Let me also make the analogy to the meetings you go to where you know you discussed the same think the week before and the week before and the week before. Quality does not necessarily cost more, it costs less. And that clearly is the heresy, and I would hate to have this get out of the room, but I am not convinced we don't have enough money to do our job, I question how well we use our resources to do that job.

George Johnson, president of George Mason University, made a powerful statement earlier in this conference at a general session. In response to *How does the American consumer view higher education?* he said, in his judgment, the American public saw us as overpriced, underperforming, and possibly corrupt. If I'm going to disagree at all with President Johnson, it's over the word *possibly*. Overpriced, underperforming, and possibly corrupt. That's not much different than the way American consumers saw General Motors in 1980 and look what they did.

We have a significant competitor. In fact I have a request for AIR. I think the time has come for a nationwide study to find out just how much the significant competitor is spending on American education. Do you know who that competitor is? Business. Not just on remedial education, not just on training, you would be surprised at the amount of real graduate-level education that is going on, not only in management but in the sciences. I would like to see that data.

As a student of business, I am amazed at how long it took the American automotive manufacturers to wake up to this slow rise from 8 percent to 10 percent of imports until it got up to almost a third of the market. I suspect we have our head in the sand as much as they did. People are very unhappy with us and are setting up their own programs. They are unhappy with our inefficiency. They are unhappy with our costs, and from my first-hand evidence in talking to industry, they don't believe it should take so much time. I think we should look at business. I think we have to wake up to these needs now.

CEASE DEPENDENCY ON INSPECTION

Point 3: Cease dependency on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place. Cross pen, a fine pen, right? Most of you will agree. They inspect every single pen they make. They actually test it out to see if it will work. Do you know what their return rate is? Two out of every hundred. If you want quality, you have to move upstream. At the end of a production line, at the end of somebody's education, it is too late to change them.

Let me demonstrate to you just how well this can work. The following story is reported in a book by Gitlow and Gitlow, called *The Deming guide to quality and competitive position* (Englewood Cliffs, N.J., Prentice-Hall, Inc. 1987). It is a story about IBM. I have met a couple of IBM executives who ought to know whether this story is true or not, and I have asked them personally if it's true, and they just smile. So I will let you decide if it is. I don't know. The story goes as follows: When IBM heard about the wonderful way the Japanese make computer chips, they decided they would order some to see just how well

they were made. This was several years ago and they placed an order for 10,000 chips and in that order they put their usual specification for quality which means a lack of defective chips, and they gave them what they considered to be the most absurd quality requirements in the world. They wanted no more than three per 10,000 defective. In the United States, if we get into the one out of one hundred we are thrilled and anybody knows nine out of a thousand, that's Utopia. Well, as the story goes, the chips arrived in a box one day and on the top of the box was a letter and the letter said something along these lines: *We don't understand you Western business people, but we satisfied your request. In the box are your 10,000 chips. The three defective ones are in the manilla envelope.*

I think we should use their methods, not ours. They are that sure of what they are doing by using quality input, quality materials, quality people who are well trained and committed to doing their job, by using statistical sampling upstream, early in the process, it is unnecessary to inspect at the end.

What is the relevance to higher education? Well, accreditation has been inspection. The public has told us it failed. Assessment is a new kind of inspection. In my view, it will fail if it is only final assessment. We know we are not doing that good a job. In fact, what I am sure all too many of our institutions are going to do with assessment is say, *Yup, there's no question about it. Higher education isn't doing that good a job - except my school.* We have used accreditation as a device to raise money. How many accreditation reports have been written where we've all but shook hands under the table to say *Look, we'd like a report that says to the people of the state, city (you fill in the blank) you have an institution that's better than you deserve. Give them money.* I am sorry to say that it is my hunch that assessment will go the same way because you cannot inspect quality in. You have to look at it from another point-of-view. We have to take a process approach.

INSIST ON QUALITY MATERIALS

Point 4: (I will not have time to go through all fourteen points. I didn't plan on it. When I get to point 5 I'm going to skip the others quickly) End the process of awarding business on the basis of price tag. Instead, minimise total cost. Move towards a single supplier for one item for a long-term relationship with loyalty and trust. The key in business is - don't use low cost raw material. Don't put your suppliers in competition with each other to bid for the lowest cost because the lowest cost is likely to be junk and that piece of junk is going to wreck your finished goods. That applies a little to some of our institutions who are forced to go out for competitive bids but I think what's more applicable is the thrust of all this. The thrust of this is not the single supplier but the thrust of this is to make sure that the materials we work with are of the highest quality.

Let's go back to that undergraduate student from the United State education system. I think all of you will agree that one of the roles that the undergraduate plays is that he or she is our raw material, may or may not be our current consumer, that's debatable, but those are the people who come into the system. I don't need to belabour you with the sad state of education in the United States. But I ask the leaders of higher education institutions, and let

me assure you I've asked many many times, to the point that they are sick and tired of seeing me, *When are we, the flagship of the system, going to address the problems in K through 12?* While everyone agrees there are problems, they do not find them at their schools. They say they are happening elsewhere. We faculty know where they're going, because we complain about it too much, because we're just as guilty, we like to blame people also.

Again, I think it was President Johnson who made the observation that universities are very willing to help society solve all kinds of problems; we will help them with their infrastructure; advise them on this, advise them on that. Why don't we get together and advise them on what we are supposed to know about, what we're doing, about education? Until we tackle the problems of K through 12, we can't really improve our ability. If our raw materials are poor, we're inevitably going to have lots of scrap, lots of rework. Those are the names I prefer to use rather than attrition studies because they are probably more to the point.

IMPROVE QUALITY AND PRODUCTIVITY

Point 5: Improve quality. Improve constantly and forever the system of production of service. Improve quality and productivity, thus constantly decreasing costs. It is management's responsibility to find problems, management must work continually on the system.

This is where I think you folks fit in. The AIR summer institute will be involved in the statistical methods of quality control and how, I believe and Ellen Chaffee believes, they apply to higher education. I have found that as American businesses have wakened to this, they have turned to people like me for advice on how to manage their problems. Now, what we give them is new statistical tools. By the way, that is new to them, but known to statisticians since the 1930s; in fact, ignored by most of us, not taught in business schools at all during the 1960s, 1970s and most of the 1980s.

These tools are the ones you folks need to learn about. You need to find out about cause and effect fish bone diagrams. You need to find out about Pareto charts. You need to learn something about statistical variation when it is put in terms of a process, rather than in a static environment. You will find a lot of that in Deming's book. These are the tools that we need to improve our processes.

Let me give a simple example. Probably many of the institutions represented here have had issues arise like the following: A young woman comes in and complains about a graduate teaching assistant (GTA) from whom she is taking a class. The GTA has just asked her for a date. In today's language, *He hit on me*. What are our institutions doing when instances like this occur? We all know of instances resulting in a frustrated student yelling and screaming about the scholarship funds, or the payroll or what have you. What is our reaction? Often our reaction is to attach the symptom. We'll bring that GTA in, we'll talk it over with the woman involved, we'll quieten the situation down, try to repair things and perhaps even fire the GTA. Well, that makes sense. If you are sick and you go to a doctor with a 106 degree temperature, I can assure you that before the doctor worries about anything else, the first thing he or she is

going to do is what? Lower the temperature. The trouble is, if that is all the doctor does, are we happy with that doctor? What else do we do?

How many of us have learned the lesson that this is symptomatic of very poor training of GTAs? How many of you are even assured that every new GTA is told not to do this? We have to start treating the cause of our problem, not the systems. The statistical methods are designed to show which are the symptoms that most likely have causes. It is that simple. Which are the symptoms most likely to have causes? Our responsibility, and I hope your responsibility, your special one in institutional research, is to move more in the direction where you can present through the dean to the president, the cause of the problem, so that the action that follows is obvious. It is not action built on emotion but rather built on data.

Now, I would like to go on about this. There is nothing I enjoy doing more than talking about specifics but you did not give me a blackboard, so instead what I would like to do is read one piece. I would like to read something that was written by a graduate student at the University of Kansas, a fellow by the name of Dennis Lowden. He wrote this as a letter to the editor of the University Daily Kansan (UDK). You need a bit of information to understand this. The Wescoe Hall he will refer to is a building that has a wide-open concrete area where everybody likes to sit on a sunny day. It is called *Wescoe Beach* and is the closest thing to an ocean we have in Kansas! His letter summarises this point better than Deming, better than me.

> *There is a man who spends several hours a day around Wescoe Hall, noisily rearranging leaves and refuse on the stairs and walkways. He does this with a gas powered machined strapped to his back that seems to operate on the principle of a vacuum cleaner in reverse. It's often hard to concentrate when he's nearby, whether the object is study, conversation, or some quiet time. It's not the noise I object to, I object to this man's job.*
>
> *I'm sure he's paid well. At least I hope he is. For all he has to put up with, he should make $25 an hour. It's the person who assigned him the job that should be fired.*
>
> *The man who is blowing leaves around Wescoe is a teacher. He's teaching us what we want to know. We want to know that problems are not to be solved but to be relocated. Is there a pile of trash on the steps? Don't pick it up, blow it away. Let somebody else deal with it. Of course, nobody will, since tomorrow the same trash has to be dealt with all over again. Naturally it looks different and it is in a different place so we think it's a different problem.*

Think about those words. The time has come for us to stop addressing the symptoms but to get to the root of the cause. For those of you with a little background in statistical quality control, we have to get rid of our assignable causes. We do that one by one.

The Japanese took thirty years to improve their product. Donald Peterson has

been at it for seven years. He doesn't believe he's half-way there. There is no magic wand. It's a long journey.

Ellen Chaffee came up with a term that I like very much. *We should take quality not as a noun, but as a verb.* That is the way to the goal that we are constantly striving for. The second you become complacent and think you're there, the track record is in. Somebody will beat you out.

IMPROVING HUMAN RELATIONS

The remainder of Dr. Deming's points all involve vigorous human relations. I am just going to read some of the highlights to you. I claim that we in the academic world are not treated much better than the mythical industrial employee. **Point 6**. Institute training on the job. Ours is awful. **Point 7**. Institute leadership. The aim of leadership should be to help people, machines and gadgets do a better job. Supervision of management is in need of an overhaul, as well as supervision of production employees, and although I do not like to think of myself as one, I know that is what I am. When I came into this business, I thought I was a junior partner. I think somewhere about fifteen years ago I became a partner. Today I feel like an employee. **Point 8**. Drive out fear so everyone may work effectively in the company. How many people in your institution could do what that materials manager did at Johnson and Johnson without being worried. **Point 9**: More telling for higher education than any company I have ever worked with: break down barriers between departments. People in research, design, sales, and production must work as a team. People in the academic and administrative sides must work as a team. People in admissions and institutional sides must work as a team. One school or part of a university must work as a team. If not, we just have lots of events that cause agenda items. You have one called conflict management.

Let me introduce a little notion here that is very important. When you are looking at the process you will discover that there are other customers to be very concerned with, internal customers. Each of you are internal suppliers and internal customers, and until we cooperate in such a way that we know the needs of our internal customers and satisfy them, we are certainly never going to satisfy the needs of our external customers. One of the questions people always ask is: *How can I begin without presidential support*. My answer to you is: *Find out who you are a customer of and be a better customer; find out who you supply and be a better supplier.* This will only begin one step at a time. In fact, I am kind of happy it does. I think that if we had some magic wand to change the whole thing, we could change it all and a year later be unhappy with it. We should take it one step at a time.

Point 10. Eliminate slogans, exhortations, and targets in the workforce that have zero effect on levels of productivity without providing the means. Stop telling faculty that undergraduate education is important without giving the means to do the job.

Point 11. Eliminate work standards and quotas (I'll call it formula budget) on the factory floor. Substitute leadership. Eliminate management by objectives, management by numbers, management by numerical goal. Substitute leadership. **Point 12**: Remove the barriers that rob the hourly man and

woman from pride in workmanship. How many of our people in our universities do not know their job fits into the system? How many classified employees believe that if they were absent today the place would run just fine? And if they believe that, and if that is true, maybe that is an unnecessary job or maybe a job that needs redesigning.

Point 13. Institute a vigorous program of education. I know of no other part of our society that shows less interest in educating its employees than universities and colleges. To the credit of you folks you said *Yes, and we're going to do it ourselves. We'll establish AIR, run our own forums, our own institutes, because you know, it's not that available at home.*

Point 14. Put everybody in the organisation to work to accomplish this transformation. The transformation is everybody's job, and I think particularly it has to be your job. Your job in institutional research is not unlike the job of my colleagues in business-consultants. What I am asking you to do is learn more about this. I am asking you to become more than people who present numbers, but rather people who present formulated problems with data. I am asking you to learn and then to educate. Educate the best you can whichever manager you see in sight who is willing to learn. It would be nice if it was your president but if it happens to be a dean or the department chair, it will work. The only way this has worked in organisations is to find a core group that is interested and start using it.

What we need to do in higher education, in my opinion, is to figure out who our customers are and do what Ford and others have done: make a commitment to excellence. I really mean that word commitment. Not just talk but actions. A commitment to excellence throughout the entire organisation. Everybody counts. Work to better satisfy the needs of all our customers in the organisation today and tomorrow.

I really appreciate the opportunity to share these thoughts with you. I hope that some of you will take this to heart and read the recommended book. Is there a better way of managing higher education? There better be. I think there is, and I think some of the model is available to us. Let's take a look at it. The answer is *Yes*. Any questions?

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(Professor Sherr)

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From higher education

Forthcoming from Ellen Chaffee and/or Lawrence Sherr. Look for titles. Nothing printed is known at this date - 15/2/91.

In general

General source for most publications (at least in the USA) on quality control (statistical or managerial) is the American Society for Quality Control, 310 West Wisconsin Street, Milwaukee, WI 53203.